

Volume

#

R0322

BOOK A-322

FIELD NOTES

OF THE SURVEY OF THE

Aquarius Forest Reserve Boundary,

State of Utah,

Of the Salt Lake Base and Meridian,

AS SURVEYED BY

orders
 der his ~~Contract~~ No. _____, United States Deputy Surveyor,
 dated May 13, 1904.
 rvey commenced June 13, 1904.
 rvey completed September 26, 1904.

NAMES AND DUTIES OF ASSISTANTS.

| | |
|----------------------------------|-----------------|
| J. J. Elliott, | Chairman |
| P. S. Darlington, | " |
| A. C. Winer, | " |
| Arthur B. McIntire, | " |
| I. A. Willis, | Mouldman & Assn |
| J. J. Elliott, | " " |
| Albern Allen, | Mouldman & Assn |
| William Brinkerhoff, C. I. Luke, | Assn |
| Arthur B. McIntire, | Flagman |

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PRELIMINARY OATHS OF ASSISTANTS.

WE, J. J. Elliott, A. G. Wimer, P. S. Darlington & Arthur B. McAntire,
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

Aquarius Forest Reserve Boundary,

J. J. Elliott, Chainman
A. G. Wimer, "
P. S. Darlington, Chainman
Arthur B. McAntire, "

Subscribed and sworn to before me this 14

day of June, 1904.

Aug. 3 and Sept. 9 for Elliott.

Aug. 8 for McAntire.

June 24 " Darlington.

Jno. P. Walker,

U. S. Surveyor.

WE, L. A. Willis, J. J. Elliott, and Albern Allen
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment
of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

Aquarius Forest Reserve Boundary,

L. A. Willis, Moundman
J. J. Elliott, "
Albern Allen, Moundman

Subscribed and sworn to before me this 14

day of June, 1904.

June 24 for J. J. Elliott.

Sept. 19 for Allen.

Jno. P. Walker,

U. S. Surveyor.

WE, L. A. Willis, Albern Allen, J. J. Elliott, Wm. Brinkerhoff, and G. L. Luke
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

Aquarius Forest Reserve Boundary,

L. A. Willis, Axman
Albern Allen, "
J. J. Elliott, Axman
Wm. Brinkerhoff, "
G. L. Luke, "

Subscribed and sworn to before me this 14

day of June, 1904.

June 24 for J. J. Elliott.

Aug. 24 for Wm. Brinkerhoff,

Sept. 12 for G. L. Luke.

Aug. 16 2 Willis & Allen.

Jno. P. Walker,

U. S. Surveyor.

I, Arthur B. McAntire,
do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
survey of Aquarius Forest Reserve Boundary,

Arthur B. McAntire, Flagman

Subscribed and sworn to before me this 14

day of June, 1904.

Jno. P. Walker,

U. S. Surveyor.

Aug. 24, Allen & Willis,
made cook and teamster.

INDEX TO THE AQUARIUS FOREST RESERVE, UTAH.

The map displays a grid of land parcels, each labeled with its township and range designations. The parcels are arranged in a complex, irregular pattern. The labels include:

- T.30S. R.1E.
- T.30S. R.2E.
- T.31S. R.1W.
- T.31S. R.6E.
- T.32S. R.1W.
- T.32S. R.3E.
- T.32S. R.4E.
- T.32S. R.5E.
- T.33S. R.2W.
- T.33S. R.3E.
- T.33S. R.4E.
- T.33S. R.5E.
- T.34S. R.1E.
- T.34S. R.2W.
- T.34S. R.3E.
- T.34S. R.4E.
- T.34S. R.5E.
- T.34S. R.6E.

The map also shows various section numbers and boundaries, indicating the specific location of each parcel within the reserve.

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Township 34 S., Range 2 E.

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Handwritten annotations in the diagram:

- 101, 102, 103, 104, 105, 106, 107, 108, 109, 110

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AQUARIUS FOREST RESERVE BOUNDARY.

Chains.

Survey commenced June 15, 1904, and executed with a Young & Sons light mountain transit with Smith solar attachment. The instrument is provided with two verniers reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

Having tested instrument levels, standards and line of collimation, and in order to test solar apparatus, I proceed as follows:

At corner of secs. 1, 2, 35 and 36, Tps. 34 and 35 S., R. 2 W., in latitude $37^{\circ}48'36''$ N., longitude $112^{\circ}01'$ W. from Greenwich, I observe Polaris at eastern elongation at $14^h03.5^m$ astronomical time June 12th ($3\frac{1}{2}$ minutes past 2 a.m. June 13, l.m.t.) and mark the line thus determined by hub in ground 5.00 chs. N. of corner.

June 13: At 7 a.m. I set off to the west $1^{\circ}31.5'$ the azimuth of Polaris and mark true meridian by hub in ground 5.00 chs. N. of corner. At the same hour I set off $37^{\circ}48'30''$ on latitude arc and $23^{\circ}14'$ N. on the declination arc and establish meridian with solar with same latitude and declination at 16 seconds before noon l.m.t. I observe sun on meridian and find latitude correct.

At 5 p.m. I set off same latitude and $23^{\circ}15'30''$ N. on declination arc and establish meridian with solar and find that a.m. and p.m. observations agree with meridian established by Polaris.

The magnetic bearing of the meridian is N. $15^{\circ}57'$ W. which gives the magnetic declination $15^{\circ}57'$ E.

June 13, 1904

June 14:

From the corner of secs. 1, 2, 35 and 36 just described I run

East on true line between secs. 1 and 36 along E. E. slope of spur, gradually descending, through open land with some scattering timber.

9.00 Base of 20-foot descent at west side of open flat hollow, bears N. W. and S. E.

18.00 Wash in hollow, course N. 70° W.

22.00 Begin ascent, bears N. W. and S. E.

25.50 Top of 40 foot ascent on south slope of spur; begin descent N. E. and S. W.

26.50 Side hill draw, 10 lks. wide, course S., at base of 30 foot descent; begin ascent bears N. and S.

30.00 Top of 60 foot ascent on south slope of spur; begin descent, bears N. E. and S. W.

32.50 Side hill draw, 10 lks. wide, course S., at base of 50 foot descent; begin ascent, bears N. and S. E.

36.00 Top of 50 foot ascent on south slope of spur, begin descent, bears N. E. and S. W.

40.00 After diligent search, no trace of $\frac{1}{2}$ corner being found and no evidence of its former position being obtainable,

I set U. S. Forest Reserve Boundary Post No. 1, $2\frac{1}{2}$ ft. in ground and build mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high around same, for $\frac{1}{2}$ sec. corner and for S. W. corner of Reserve, marked

U. S. Forest Reserve Boundary Post No. 1, on top of cap;

RESERVE on N. E. quadrant,

R. 2 W. on S. E. quadrant,

T. 35 S. on S. W. quadrant

$\frac{1}{2}$ S 36. on N. W. quadrant, from which a

Pine, 24 ins. diam., bears N. $7^{\circ}30'$ W., 229

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 2 W.

Chains.

lks. dist., marked $\frac{1}{4}$ S 36 B T

No other trees available.

40.50

Draw, 10 lks. wide, course S. W., at base of 50 foot descent.

42.50

Draw, 10 lks. wide, course N. W. for 2 chs. to former draw. Begin ascent, bears N. E. and S. W.

47.00

Top of 70 foot abrupt ascent, bears N. W. and S., and enter timber, bears N. W. and S.

73.50

Draw, 5 lks. wide, course N.

79.50

A sandstone marked and witnessed for corner of Tps. 33 and 34 S., Rs. 1 and 2 W., bears N. 53 lks. dist.

Note: This corner being improperly marked and not officially accepted according to information given by General Land Office also by Surveyor General of Utah, I leave same undisturbed and make my survey independent of its existence, according to instructions dated June 28, 1904.

80.00

Set U. S. Forest Reserve Boundary Post No. 2, 18 ins. in ground to rock, and build mound of stone and earth, 5 ft. base, 2 ft. high, around same for S. E. corner to T. 34 S., R. 2 W., and N. E. corner of T. 36 S., R. 2 W., marked

RESERVE in N. W. quadrant,

T 35 S R 2 W S 1 in S. W. quadrant, with 6 notches on N., S. and W. faces, from which A pine, 20 ins. diam., bears S. $48^{\circ}15'$ W., 160

lks. dist., marked T 35 S R 2 W S 1 B T

A pine, 26 ins. diam., bears N. 11° W., 43 lks. dist., marked RES T 34 S R 2 W S 36 B T

Timber, scattering pine.

Land, rolling and rocky.

Soil, sandy and rocky, 4th rate.

June 14, 1904.

Note: This corner established July 8, 1904, after south boundary of T. 34 S., R. 1 W., has been run and the necessity of a closing corner for S. W. corner of T. 34 S., R. 1 W., demonstrated.

June 15: At 7h09m a.m., l.m.t., I set off $37^{\circ}48\frac{1}{2}'$ on the latitude arc and $22^{\circ}20'$ N. on the declination arc and determine a true meridian with the solar. Magnetic declination $15^{\circ}57'$ E., at the corner of Tps. 34 and 35 S., R. 2 W.

East on random line along the south boundary of T. 34 S., R. 1 W., setting temporary stake for $\frac{1}{4}$ sec. corner between secs. 6 and 31 at 39.44 chs., allowing for theoretical convergency, thence setting temporary stakes for section and $\frac{1}{4}$ sec. corners at 40.00 chs. interval and at 475.01 chs. intersect the Salt Lake Meridian 9.09 chs. south of corner to Tps. 34 and 35 S., Rs. 1 E. and 1 W.

June 18, 1904.

July 6: As this closing will make township line deviate from a west course more than 21' of arc, I run due west on true line from corner of Tps. 34 and 35 S., Rs. 1 E. and 1 W. just noted, according to special instructions dated June 28, 1904.

July 6: At 7h4m26s a.m., l.m.t., I set off $37^{\circ}48\frac{1}{2}'$ on latitude arc and $22^{\circ}43\frac{1}{2}'$ N. on the declination arc and establish meridian with solar. Magnetic declination $16^{\circ}10'$ E. at corner of Tps. 34 and 35 S., R. 1 E. and 1 W.

Thence I run

West on true line between secs. 1 and 36, over rolling land through open timber.

3

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

| | |
|---------|--|
| Chains. | |
| .03 | Set U. S. Forest Reserve Boundary Post No. 8, 2 ft. in ground, and build mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high around same, marked RESERVE in N. W. and N. E. quadrants, with no other markings. |
| 30.00 | Draw, 10 lks. wide, course S. 20° E., begin ascent, bears N. 20° W. and S. 20° E. |
| 33.50 | Top of 50 foot ascent on south slope of spur; begin descent, bears N. W. and S. E. |
| 38.00 | Base of 40 foot descent at draw, 10 lks. wide, course S. E.; begin ascent, bears N. W. and S. E. |
| 40.00 | Set a limestone 24 x 12 x 8 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which |
| | A pine, 20 ins. diam., bears N. 86° E., 75 lks. dist., marked RES $\frac{1}{4}$ S 56 B T |
| | A pine, 22 ins. diam., bears S. 75° W., 140 lks. dist., marked $\frac{1}{4}$ S 1 B T |
| 43.00 | Top of ascent 50 feet, on S. E. slope of spur; begin descent, bears N. 80° W. and S. 80° E. |
| 51.00 | Draw, 5 lks. wide, course S. 20° E. at base of 30-foot descent, bears N. 20° W. and S. 20° E. |
| 54.80 | Draw, 15 lks. wide, course S. 70° E.; begin ascent, bears N. W. and S. E. |
| 66.50 | Pine tree, 30 ins. diam., on line I mark with 2 notches on E. and W. sides. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 7, 18 ins. in ground to rock, and build mound of stone and earth, 5 ft. base, 2 ft. high, around same for corner of secs. 1, 2, 35 and 36, marked RESERVE in N. E. and N. W. quadrants, R 1 W S 1 in S. E. quadrant, T 35 S S 2 in S. W. quadrant, with 1 notch on E. and 5 notches on W. faces, from which |
| | A pine, 18 ins. diam., bears N. 27° E., 71 lks. dist., marked RES T 34 S R 1 W S 36 B T |
| | A pine, 18 ins. diam., bears S. $44^{\circ}30'$ E., 129 lks. dist., marked T 35 S R 1 W S 1 B T |
| | A pine, 22 ins. diam., bears S. $0^{\circ}30'$ W., 55 lks. dist., marked T 35 S R 1 W S 2 B T |
| | A pine, 20 ins. diam., bears N. 70° W., 21 lks. dist., marked RES T 34 S R 1 W S 35 B T |
| | Corner falls on E. slope of hill 300 ft. above last draw. |
| | Timber, scattering pine and cedar; pin oak underbrush. |
| | Land, hilly and rocky. |
| | Soil, gravelly; 4th rate. |

| | |
|-------|--|
| | At 12h4m26 ^s l.m.t., I set off $22^{\circ}41\frac{1}{2}'$ N. on the declination arc and observe sun on meridian and obtain a reading of $37^{\circ}48\frac{1}{2}'$ on latitude arc, which agrees with other data. |
| | From corner of secs. 1, 2, 35 and 36 I run West on true line between secs. 2 and 35, through timber, ascending, bears N. 20° W. and S. 20° E. |
| 5.00 | Top of 40 foot ascent, bears N. W. and S. E.; thence over flat bench. |
| 24.00 | Draw, 10 lks. wide, course N. 20° E.; begin ascent bears N. and S. |
| 29.20 | Draw, 10 lks. wide, course N. 20° E.; leave timber and begin abrupt ascent over sandstone and flint slide rock, bears N. 20° W. and S. 20° E. |
| 40.00 | Set sandstone 18 x 10 x 8 ins., 12 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, and build mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of |

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

Chains. corner; pits impracticable. Corner falls on steep slide rock sloping to N. E.
56.90 Top of 800 foot ascent, on backbone of spur, sloping to S. E. Thence cross spur and continue ascent, bears N. 80° E. and S. 80° W., along steep S. slope of spur and enter timber, bears N. and S.
80.00 Set ^{iron} U. S. Forest Reserve Boundary Post No. 6, 2 ft. in ground, and raise mound of stone, 4 ft. base, 1½ ft. high around same, for corner of secs. 2, 3, 34 and 35, marked
RESERVE on N. E. and N. W. quadrants,
R 1 W S 2 in S. E. quadrant
T. 35 S S 3 in S. W. quadrant, with 2 notches on E., and 4 notches on W. sides, from which a
Pine, 8 ins. diam., bears N. 25°30' E., 90 lks. dist., marked RES T 34 S R 1 W S 35 B T
Fir, 14 ins. diam., bears S. 33°30' E., 121 lks. dist., marked T 35 S R 1 W S 2 B T
Fir, 22 ins. diam., bears S. 25°30' W., 248 lks. dist., marked T 35 S R 1 W S 3 B T
Fir, 18 ins. diam., bears N. 26° W., 129 lks. dist., marked RES T 34 S R 1 W S 34 B T
Corner falls on south slope of slide rock hill 850 ft. above draw.
Timber, scattering pine, spruce and fir.
Land, mountainous and precipitous.
Soil, principally small slide rock, 4th rate.
July 6, 1904.

July 7: At 7h4m30s a.m., l.m.t., I set off 37°48½' on latitude arc and 22°37½' N. on the declination arc and establish true meridian with solar.
Magnetic declination 16°00' at corner of secs. 2, 3, 34 and 35.
Thence I run
West on true line between secs. 3 and 34, through timber, ascending, bears N. 80° E. and S. 80° W.
3.00 Fresh water spring, bears S., 3 chs. dist., and drains to S. E.
5.40 Draw, 5 lks. wide, course S. E. Ascent becomes abrupt and bears N. 80° E. and south.
18.70 Head of draw, 5 lks. wide, course N. 70° E.
40.00 Set trachyte boulder 28x18x14 ins., 18 ins. in slide rock of small boulders on N. E. slope of hill, 450 ft. above sec. corner, for ¼ sec. corner, marked ¼ on N. face, from which
A spruce, 18 ins. diam., bears N. 49°30' E., 46 lks. dist., marked RES ¼ S 34 B T
A spruce, 22 ins. diam., bears S. 15°30' E., 100 lks. dist., marked ¼ S 3 B T
53.00 Top of ascent, bears N. W. and S. E., 50 ft. above ¼ sec. corner; thence across north end of table cliff plateau.
80.00 Set ^{iron} U. S. Forest Reserve Boundary Post No. 5, 2 ft. in ground, and raise mound of stone and earth, 4 ft. base, 1½ ft. high, around same, for corner of secs. 3, 4, 33 and 34, marked
RESERVE in N. E. and N. W. quadrants,
R 1 W S 3 in S. E. quadrant,
T 35 S S 4 in S. W. quadrant, with 3 notches in E. and W. sides, from which
A balsam, 10 ins. diam., bears N. 62°30' E., 25 lks. dist., marked RES T 34 S R 1 W S 34 B T

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

Chains.

- A spruce, 18 ins. diam., bears S. 34° E., 57
lks. dist., marked T 35 S R 1 W S 3 B T
A balsam, 14 ins. diam., bears S. 24°30' W.,
36 lks. dist., marked T 35 S R 1 W S 4 B T
A spruce, 12 ins. diam., bears N. 10° W., 16
lks. dist., marked RES T 34 S R 1 W
S 33 B T

Land, mountainous; second half level.

Timber, quaking asp, spruce, fir and pine.

Soil, second half, gravelly, 4th rate; first half,
red soil, bar slide rock.

At this corner at 12^h4^m₂ l.m.t., I set off 22°35¹/₂'
N. on the declination arc and observe sun on mer-
idian and obtain a reading of 37°48'30" on lati-
tude arc, which agrees with other data.

Note: 10 chs. south and 1.36 chs. east of this cor-
ner is a rock corner marked and witnessed for cor-
ner of secs. 3, 4, 33 and 34, Tps. 33 and 34 S.,
R 1 W., in an unofficial survey.

From corner of secs. 3, 4, 33 and 34, Tps. 34 and
35 S., R. 1 W., I run

West on true line between secs. 4 and 33, through
timber over nearly level plateau.

5.00

Begin gradual descent, bears N. and S.

21.00

Begin abrupt descent over slide rock, bears N. and S.

28.60

Base of 300-foot descent, bears N. 20° E. and S.

Spring brook, 2 lks. wide, course S. 20° W.

Spring bears N., 30 lks. dist., fresh water;

thence along steep side hill sloping to S.

40.00

Set a limestone 20x14x6 ins., 15 ins. in ground
for ¹/₄ sec. corner, marked ¹/₄ on N. face, from which

A pine, 8 ins. diam., bears N. 52° E., 6 lks.

dist., marked RES ¹/₄ S 33 B T

A cedar, 16 ins. diam., bears S. 7° W., 23 lks.

dist., marked ¹/₄ S 4 B T

42.00

Begin descent, bears N. W. and S. 80° E.

60.50

Draw, 10 lks. wide, course S. 20° W., at base of
250-foot descent; thence along S. slope of spur.

76.00

Begin descent, bears N. W. and S. 80° E.

80.00

Set U. S. Forest Reserve Boundary Post No. 4, 2 ft.
in ground, and build mound of stone, 4 ft. base,
1¹/₂ ft. high, around same, for corner of secs.
4, 5, 32 and 33, marked

RESERVE in N. E. and N. W. quadrants,

R. 1 W S 4 in S. E. quadrant,

T 35 S S 5 in S. W. quadrant, with 4 notches
on E. and 2 on W. sides, from which

A pine, 22 ins. diam., bears N. 62° E., 37 lks.

dist., marked RES T 34 S R 1 W S 33 B T

A pine, 26 ins. diam., bears S. 34° E., 130

lks. dist., marked T 35 S R 1 W S 4 B T

A black balsam, 18 ins. diam., bears S. 61° W.,

64 lks. dist., marked T 35 S R 1 W S 5 B T

A pine, 16 ins. diam., bears N. 68° W., 111

lks. dist., marked RES T 34 S R 1 W S 32

B T

Timber, pine, spruce, fir, cedar and quaking aspen.

Land, mountainous.

Soil, gravelly and rocky, 4th rate.

July 7, 1904.

Note: 10 chs. S. and 3.37 chs. E. of this corner is
an old rock corner, marked and witnessed for corner
of secs. 4, 5, 32 and 33, on unofficial survey.

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

| | |
|---------|---|
| Chains. | July 8: At 7 ^h 4 ^m 45 ^s a.m., l.m.t., I set off 37°48'30" on latitude arc and 22°31' N. on the declination arc and establish meridian with solar. Magnetic declination 16°08' E. at corner of secs. 4, 5, 32 and 33. Thence I run West on true line between secs. 5 and 32, through timber, descending, bears N. and S. E. |
| 15.30 | Base of descent, 100 ft. below sec. corner, bears N. 30° E. and S. 30° W. at dry branch, 20 lks. wide, course S. 30° W.; begin ascent, bears N. 30° E. and S. 30° W. |
| 18.50 | Top of 50-foot ascent, on S. slope of spur, thence along S. slope of spur. |
| 23.00 | Begin descent, bears N. W. and S. 80° E. |
| 36.00 | Base of 50-foot descent at dry branch, 20 lks. wide, course S. 20° W.; begin ascent, bears N. 20° E. and S. 20° W. |
| 39.00 | Side hill wash, 5 lks. wide, course S. |
| 40.00 | Set sandstone 18x10x8 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which A pine, 14 ins. diam., bears N. 43°30' W., 22 lks. dist., marked RES $\frac{1}{4}$ S 32 B T. A black balsam, 12 ins. diam., bears S. 31° E., 41 lks. dist., marked $\frac{1}{4}$ S 5 B T |
| 42.00 | Top of 40 ft. ascent on S. slope of hill, thence descending, bears N. 80° W. and S. 80° E. |
| 55.50 | Base of 80 ft. descent, bears N. 20° E. and S. 20° W. at draw, 10 lks. wide, course S. 20° W.; thence over rolling surface along S. slope near foot of hill. |
| 76.60 | An old corner rock marked for corner of secs. 5, 6, 31 and 32, Tps. 33 and 34 S., R. 1 W., of an unofficial survey, bears S. 9.36 chs. dist. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 3, 2 $\frac{1}{2}$ ft. in ground, and build mound of stone and earth, 3 ft. base, 1 ft. high, around same, for corner of secs. 5, 6, 31 and 32, marked RESERVE in N. W. and N. E. quadrants, R. 1 W., S. 5 in S. E. quadrant, T. 35 S., S 6 in S. W. quadrant, with 1 notch on W. and 5 notches on E. sides, from which A pinion, 8 ins. diam., bears N. 55°30' E., 83 lks. dist., marked RES T 34 S R 1 W S 32 B T A pine, 22 ins. diam., bears S. 70°30' E., 69 lks. dist., marked T 35 S R 1 W S 5 B T A spruce, 10 ins. diam., bears S. 12° W., 121 lks. dist., marked T 35 S R 1 W S 6 B T A spruce, 20 ins. diam., bears N. 79° W., 83 lks. dist., marked RES T 34 S R 1 W S 31 B T Corner falls at foot of hill, 50 lks. N. of creek bank. Land, mountainous. Timber, pine, spruce, fir and cedar, all of inferior size except pine. Soil, rocky and gravelly, 4th rate. |

At 12^h4^m46^s l.m.t., at this corner I set off 22°28'30" N. on declination arc and observe sun on meridian and obtain a reading of 37°48'30" on latitude arc, which agrees with other data.

7

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

| | |
|--------|--|
| Chains | From corner of secs. 5, 6, 31 and 32 I run West on true line through scattering trees over rolling land. |
| 1.20 | South creek, 30 lks. wide, 12 foot banks, course N. 70° W., stream of fresh water, 4 lks. wide, 3 ins. deep, sinks about 1 mile further down creek. |
| 2.00 | Leave timber, bears N. 70° W. and S. 70° E.; enter open sage brush bottom. |
| 9.50 | Enter swampy ground, quaking asp timber and underbrush, bears N. 70° W. and S. 70° E., draining to N. 70° W. |
| 11.00 | Leave swamp, enter scattering timber, bears N. 70° W. and S. 70° E., begin gradual ascent. |
| 28.00 | Top of 50 foot ascent and begin steep descent, bears N. 30° W. and S. 30° E. |
| 32.30 | Open hollow draw, course N. 30° W., at base of 50 foot descent, begin ascent, bears N. W. and S. 30° E. |
| 38.00 | Top of 40 foot ascent on N. slope of spur, begin descent, bears N. E. and S. W. |
| 40.00 | Set a sandstone 22x12x 5 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which <ul style="list-style-type: none"> A pine, 20 ins. diam., bears N. 50°15' E., 203 lks. dist., marked RES $\frac{1}{4}$ S 31 B T A pine, 26 ins. diam., bears S. 53°15' E., 93 lks. dist., marked $\frac{1}{4}$ S 6 B T |
| 41.00 | Base of 30 foot descent, bears N. E. and S. W. |
| 42.00 | Open hollow draw, 10 lks. wide, course N. 20° E. |
| 43.50 | Begin ascent, bears N. E. and S. 80° W. |
| 56.00 | Top of 80 foot ascent, bears N. 20° E. and S. 20° W.; begin descent, bears N. W. and S. 20° E. |
| 73.50 | Base of 80 foot descent, bears N. 20° W. and S. 20° E.; draw, 10 lks. wide, course N. 20° W. |
| 75.01 | Intersect N. and S. range line between Rs. 1 and 2 W., 9.09 chs. north of Forest Reserve Boundary Post No. 2, corner set by me for S. E. corner of T. 34 S., R. 2 W., and N. E. corner of T. 35 S., R. 2 W., at which point I set U. S. Forest Reserve Boundary Post No. 2 $\frac{1}{2}$, 2 ft. in ground, around which I build a mound of stone 4 ft. base, 1 $\frac{1}{2}$ ft. high, for closing corner of Tps. 34 and 35 S., R. 1 W., marked <ul style="list-style-type: none"> RESERVE in N.E., N.W. and S.W. quadrants, T 35 S R 1 W S 6 in S. E. quadrant, C C on east side, with 6 notches on east side, from which <ul style="list-style-type: none"> A pine, 30 ins. diam., bears N. 69°30' E., 163 lks. dist., marked RES CC T 34 S R 1 W S 31 B T A pine, 26 ins. diam., bears S. 56° E., 335 lks. dist., marked CC T 35 S R 1 W S 6 B T |
| | Timber, scattering pine. |
| | Land, rolling. |
| | Soil, gravelly and sandy, 3rd and 4th rate. |

At 5^h44^m45^s p.m., 1.m.t., I set off 37°48'30" on latitude arc and 22°28' N. on the declination arc at corner of secs. 1, 2, 35 and 36 of Tps. 34 and 35 S., R. 2 W., and test instrument on meridian established by me June 13, 1904, and find same correct.

Tps. 34 and 35 S., R. 1 W., are mountainous, the Aquarius Plateau occupying center N. and S. of T. 34 S., and Table cliff plateau occupying

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 W.

Chains.

center N. and S. of T. 35 S. The range line between Rs. 1 and 2 W. and the Salt Lake Meridian running along sides of mountains near foot hills. T. 35 S., R. 1 W., should be included in the Reserve.

July 8, 1904

June 18, 1904: At 10h15^m p.m., l.m.t., I observe Polaris in accordance with Manual instructions and mark the direction thus determined by peg firmly set in ground 5.00 chs. north of my station (which is near the corner of Tps. 34 and 35 S. Rs. 1 E. and 1 W.)

| | |
|--|----------------------|
| U. C. June 15, 1904, | 19h46.8 ^m |
| Dif. for 3 days, | 11.7 |
| U. C. June 18, | 19h35.1 ^m |
| Time of observation, | 10 15 |
| Hour angle and time argument, | 9h20 ^m |
| Longitude 111°54', latitude 37°48'30" N. | |
| Azimuth corresponding to time argument from Table VII = 0°57'. | |

June 18, 1904

June 19: At 7 a.m. I set off to the west the azimuth of Polaris 0°57' and mark meridian by pencil stuck in stake firmly driven in ground and test solar throughout day, and find same correct to within less than $\frac{1}{2}$ of a minute of arc.

June 19, 1904.

June 20: At corner of Tps. 34 and 35 S., Rs. 1 E. and 1 W., on Salt Lake Meridian, which is a sandstone (instead of limestone as called for) 10x8x10 ins. above ground, marked and witnessed as described in notes furnished by General Land Office, at 7h15^m l.m.t., at the corner above described I set off 37°48'30" on the latitude arc and 25°27'45" N. on the declination arc and determine meridian with the solar, Mag. Dec. 15°42' E.

Thence I run

East on a random retracement line between secs. 6 and 31, through scattering timber.

40.16

Intersect N. and S. $\frac{1}{2}$ sec. line 19 lks. S. of $\frac{1}{2}$ corner between secs. 6 and 31, which is a limestone (instead of sandstone) 10x8x8 ins. above ground, marked as described in notes of General Land Office, witnessed by

A pine, 26 ins. diam., bears N. 51° W., 108 lks. dist., instead of N. 41° W., 108 lks. dist., as called for in notes, and
A pine, 24 ins. diam., bears S. 62° E., 140 lks. dist., instead of S. 52° E., 140 lks. dist., as called for in notes.

Thence from the $\frac{1}{2}$ corner I run

S. 89°44' W. on true line, descending, bears N.E. and S. W.

1.60

Base of descent 30 ft. below $\frac{1}{2}$ sec. corner.

4.20

Creek, 5 lks. wide, 3 ins. deep, fresh water, Course N. 60° E.

40.16

Corner of Tps. 34 and 35 S., Rs. 1 E. and 1 W. From $\frac{1}{2}$ sec. corner between secs. 6 and 31 I run East on random retracement line between secs. 6 and 31, through scattering timber, ascending, bears N. E. and S. W.

40.13

Intersect N. and S. sec. line 18 lks. N. of corner of secs. 5, 6, 31 and 32, which is a trachite boulder, marked and witnessed as described in notes of General Land Office.

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

| | |
|--------|---|
| Chains | Thence from section corner I run |
| | North 89°45' W. on true line between secs. 6 and 31, descending along steep N. slope of hill. |
| .03 | Set U. S. Forest Reserve Boundary Post No. 9, 2 ft. in ground, and build mound of stone, 4 ft. base, 1½ ft. high, around same for boundary line marking, marked |
| | RESERVE in N. E. and N. W. quadrants. |
| 7.80 | Side hill draw, 5 lks. wide, course N. |
| 20.30 | Base of 100 foot descent at draw, course N. E., for 3 chs., into creek; begin ascent bears N. E. and S. W. |
| 25.00 | Top of 50 foot ascent, bears N. 70° E. and S. 70° W. |
| 36.50 | Begin descent, bears N. 80° E. and S. 80° W. |
| 40.13 | ½ sec. corner, between secs. 6 and 31. |
| | Land, hilly. |
| | Soil, sandy and rocky, 4th rate. |
| | Timber, scrubby pine and cedar |
| <hr/> | |
| | At corner of secs. 5, 6, 31 and 32, I set off 23°27' N. on the declination arc, and at 12 ^h 1½ ^m , l.m.t., observe sun on meridian and obtain a reading of 37°48'30" on latitude arc. |
| | Note: The bearing of this line is reported by General Land Office notes as S. 89°59' E. I run random line due east on account of its lessening probability of error. |
| | Thence I run |
| | East on random retracement line between secs. 5 and 32, gradually ascending along N. slope of hill through timber. Magnetic declination 15°45' E. |
| 39.70 | Intersect N. and S. ½ sec. line 41 lks. south of the ½ sec. corner, which is a trachite (instead of sandstone) 10x3x5 ins. above ground, marked and witnessed as described in notes of General Land Office. |
| | Thence I run |
| | S. 89°25' W. on true line. |
| 8.20 | Begin descent, bears N. E. and S. W. |
| 10.00 | Base of 25-foot descent at draw, 8 lks. wide, course N. E. Begin ascent, bears N. E. and S. W. |
| 14.00 | Cross backbone of spur and continue gradual ascent along N. slope of same. |
| 31.00 | Top of 100-foot ascent on N. slope of spur; begin descent, bears N. 80° E. and S. 80° W. |
| 39.70 | At corner of secs. 5, 6, 31 and 32, 25 ft. below last summit. |
| | From the ½ sec. corner |
| | I run east on random retracement line between secs. 5 and 32. |
| 40.06 | Intersect N. and S. sec. line, 123 lks. S. of corner of secs. 4, 5, 32 and 33, which is a sandstone 8x10x14 ins. above ground, marked and witnessed as described in notes of General Land Office. |
| | Thence I run |
| | S. 88°15' W. on true line between secs. 5 and 32, descending, bears N. and S., through timber. |
| 3.30 | Base of 40-foot descent, bears N. and S., at draw, 5 lks. wide, course S. 20° W. |
| 7.80 | Leave timber, enter Liston's field of lucern, bears N. W. and S. E. |
| 20.00 | Birch Creek, bed 80 lks. wide, stream fresh water, 5 lks. wide, 3 ins. deep, course S. E. |
| 21.20 | Fence, leave Liston's field, enter timber, bears N. 60° W. and S. 30° E. |

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

| | |
|---------|--|
| Chains. | |
| 21.40 | Escalante and Coyote wagon road, bears N. 60° W. and S. 60° E. |
| 21.76 | Set U. S. Forest Reserve Boundary Post No. 10 for boundary line marking on west side of road, 18 ins. in ground to rock, with mound of stone 4 ft. base, 2 ft. high, around same, marked RESERVE in N. E. and N. W. quadrants. No bearing trees available; begin ascent, bears N. 60° W. and S. 30° E. |
| 24.50 | Top of 60 foot ascent, bears N. 60° W. and S. 30° E. |
| 40.06 | At the $\frac{1}{4}$ sec. corner between secs. 5 and 32. Land, hilly and level. Soil, sandy and rocky; 4th rate, with exception of irrigated field in creek bottom, which is 2nd rate. Timber, scrubby pine, pinion and cedar. |
| | June 20, 1904: |
| | June 21: From corner of secs. 4, 5, 32 and 33, at 7 ^h 1 ^m l.m.t., I set off 37°48'30" on latitude arc and 23°28' N. on the declination arc, and establish meridian with the solar. Magnetic declination 15°50'. |
| | Thence I run East on random retracement line between secs. 4 and 33. |
| 40.00 | No trace of old corner can be found. I therefore set temporary stake for $\frac{1}{4}$ sec. corner and continue east. |
| 80.00 | No trace of sec. corner can be found, and after 2 $\frac{1}{2}$ hours diligent search I set stake for temporary corner of secs. 3, 4, 33 and 34, and continue east from same between secs. 3 and 34. |
| 120.00 | No trace of $\frac{1}{4}$ sec. corner can be found. I set temporary stake for $\frac{1}{4}$ sec. corner and continue east. |
| 160.00 | No trace of corner of secs. 2, 3, 34 and 35 being found, I set stake for temporary corner and continue east between secs. 2 and 35. |
| 179.90 | Corner of secs. 2, 3, 34 and 35, which is a sandstone 8x3x10 ins. above ground, marked and witnessed as described in notes of General Land Office, bears North, 158 lks. dist. On account of of such discrepancy in measurement I continue east on my original line without change of measurement or alignment, and at |
| 196.00 | Intersect N. and S. $\frac{1}{4}$ sec. line 2.11 chs. south of $\frac{1}{4}$ sec. corner between secs. 2 and 35. |

Note: Owing to fact that General Land Office notes call for corners with pits and mounds and further that there is no place on this entire line where bearing trees are not available, also that a resident of Escalante who claims to have helped Mr. Luman make the original survey, states that Luman ran the two miles east between secs. 6 and 31 and 5 and 32 and then came east and brought up line from the south to corner of Tps. 34 and 35 S., Rs. 1 and 2 E., and ran west 2 miles between secs. 1 and 36 and 2 and 35 and failed to connect the line by two intervening miles. The assumption is that the missing corners were never set. I therefore proceed to establish lost corners by using proportionate measurements for the full 2 $\frac{1}{2}$ miles from corner of secs. 4, 5, 32 and 33 to the $\frac{1}{4}$ sec. corner between secs. 2 and 35, which is 4 chains short of 2 $\frac{1}{2}$ miles dis-

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

Chains. regarding corner of secs. 2, 3, 34 and 35, 19.90 chs. out of place by measurement, except for alignment, making an angle in my line at this corner and setting a boundary post at the place for corner of secs. 2, 3, 34 and 35, by proportional distance for the $2\frac{1}{2}$ miles, but marking same as boundary post only. Falling at corner of secs. 2, 3, 34 and 35, being 1.58 chs. south and at $\frac{1}{4}$ sec. corner between secs. 2 and 35 being 2.11 chs. south; the difference 53 lks. for the distance of $(196^\circ - 179.90)$ 16.10 chs. gives bearing of $S88^\circ 07' W.$ for first 16.10 chs. of the return course. The falling of 1.58 chs. S. for distance of 179.90 chs. gives bearing of $S. 89^\circ 30' W.$ for balance of return course. Disregarding the corner of secs. 2, 3, 34 and 35 gives shortage of 4 chs. in dist. for $2\frac{1}{2}$ miles, or proportional shortage of 80 lks. to the half-mile.

June 21, 1904.

June 22:

Thence from the $\frac{1}{4}$ sec. corner between secs. 2 and 35, I run

$S. 88^\circ 07' W.$ on true line between secs. 2 and 35, through timber along N. slope of hill.

2.00 Draw, 5 lks. wide, course N.; begin ascent N. W. and S. E.

12.50 Top of 150 foot ascent, bears N. $20^\circ W.$ and $S. 20^\circ E.$ Begin descent.

16.10 At corner of secs. 2, 3, 34 and 35, which is a sandstone $8 \times 3 \times 10$ ins. above ground, marked and witnessed as described in notes of General Land Office.

Thence I continue on same measurement, changing bearing to $S. 89^\circ 30' W.$

26.80 Base of 350 foot descent, bears N. $20^\circ W.$ and $S. 20^\circ E.$ Draw in canyon, 20 lks. wide, course $S. 20^\circ E.$ Begin abrupt ascent, bears N. $20^\circ W.$ and $S. 20^\circ E.$

33.00 Top of 250 foot ascent, bears N. $20^\circ W.$ and $S. 20^\circ E.$

39.20 Set ^{U.S.} U. S. Forest Reserve Boundary Post No. 12, 1 ft. in ground to solid rock and build mound of stone, 5 ft. base, $2\frac{1}{2}$ ft. high, around same for boundary marking, marked

RESERVE on N. W. and N. E. quadrants, from which

A pinion, 18 ins. diam., bears N. $62^\circ E.$, 102 lks. dist., marked RESERVE B P No. 12 B T

A pinion, 14 ins. diam., bears N. $8^\circ W.$, 65 lks. dist., marked RESERVE B P No. 12 B T

Note: This post is set in the proper place by proportional measurement for corner of secs. 2, 3, 34 and 35, but is not marked for corner, as corner on accepted survey is 19.90 chs. east of this point, and I am not authorized to change same.

Land, mountainous and precipitous.

Soil, rocky, 4th rate.

Timber, scrubby pine, pinion and cedar.

From boundary post No. 12, which is in correct place for corner of secs. 2, 3, 34 and 35, I run $S. 89^\circ 30' W.$ on true line between secs. 3 and 34 through timber.

4.00 Begin descent, bears N. W. and S. E.

22.00 Begin precipitous descent, bears N. $55^\circ W.$ and $S. 55^\circ E.$

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

Chains.

32.00

Base of 250 foot descent, bears N. 55° W. and S. 55° E. Draw, 20 lks. wide, course S. 55° E. Begin precipitous ascent, bears N. 55° W. and S. 55° E.

38.00

Top of 200 foot abrupt ascent, bears N. 60° W. and S. 60° E. Continue steep ascent.

39.20

After further search for $\frac{1}{4}$ corner and failing to find same or to find any blaze or axe sign on the entire line, I set a sandstone 18x8x3 ins., 12 ins. in the ground, and build mound of stone 3 ft. base, 2 ft. high, 2 ft. north of corner, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. side, from which

A pinion, 10 ins. diam., bears N. 68° E., 40 lks. dist., marked RES $\frac{1}{4}$ S 34 B T

A pinion, 10 ins. diam., bears S. 14° E., 32 lks. dist., marked $\frac{1}{4}$ S 3 B T

40.30

Top of ascent 250 ft. above draw, thence along N. slope of hill.

47.30

Draw, 10 lks. wide, course N.

49.00

Draw, 10 lks. wide, course N. 30° E. Begin ascent, bears N. 30° E. and S.

67.00

Top of 250 foot ascent, bears N. W. and S. E.

78.40

Set $\frac{1}{4}$ S. Forest Reserve Boundary Post No. 11, 2 ft. in ground and build mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high, around same for corner of secs. 3, 4, 33 and 34, marked

RESERVE in N. E. and N. W. quadrants,

R 1 E S 3 in S. E. quadrant,

T 35 S S 4 in S. W. quadrant, with 3 notches on E. and W. sides, from which

A cedar, 15 ins. diam., bears N. 56° E., 66 lks. dist., marked RES T 34 S R 1 E S 34 B T

A pinion, 8 ins. diam., bears S. 46° E., 41 lks. dist., marked T 35 S R 1 E S 3 B T

A cedar, 8 ins. diam., bears S. 75° W., 20 lks. dist., marked T 35 S R 1 E S 4 B T

A pinion, 10 ins. diam., bears N. 20° W., 53 lks. dist., marked RES T 34 S R 1 E S 33 B T

Land, mountainous and precipitous.

Soil, rocky, 4th rate.

Timber, pinion, cedar and pine.

From corner of secs. 3, 4, 33 and 34, I run South 89°30' W., on true line between secs. 4 and 33, through timber, descending, bears N. and S.

15.00

Draw, 5 lks. wide, course S. W.

17.60

Base of 300 foot descent, bears N. and S., at draw, 10 lks. wide, course S.; begin ascent, bears N. and S.

22.00

Top of 40 foot ascent, bears N. and S. Begin descent.

33.40

Base of 100 foot descent, bears N. W. and S. E.

35.40

Dry wash in open hollow, 20 lks. wide, 12 foot banks, course S. E.

39.20

Set a sandstone 18x10x6 ins., 12 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which

A cedar, 10 ins. diam., bears N. 28°45' E., 243 lks. dist., marked RES $\frac{1}{4}$ S 33 B T

A pine, 24 ins. diam., bears S. 9°30' E., 352 lks. dist., marked $\frac{1}{4}$ S 4 B T

40.50

Begin ascent, bears N. W. and S. E.

56.40

Top of 100 foot ascent, bears N. W. and S.; begin descent. Local attraction marked at this point,

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

Chains. hemitite stone in evidence.
 69.00 Base of 75 foot descent, bears N. W. and S. E.
 73.00 Liston's pasture fence, bears N. 20° W. and S. 20° E.
 Enter Liston's claim. ✓
 76.00 Begin descent, bears N. and S.
 78.40 Corner of secs. 4, 5, 32 and 33.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, pine, pinion, spruce and cedar, mostly inferior.

Note: A comparison of the notes furnished by the General Land Office with these notes, together with the fact that no blazes nor any sign of chopping can be found and that notes call for corners with pits and mounds, proves conclusively that survey has never been made as reported.

June 22, 1904.

June 23: At 7^h2^m l.m.t., at $\frac{1}{4}$ sec. corner between secs. 2 and 35, I set off 37°48'30" on latitude arc and 23°27'30" N. on the declination arc and establish a meridian with the solar. Magnetic declination 15°45'.

Thence I run

East on random retracement line between secs. 2 and 35.

39.03 Intersect N. and S. sec. line 61 lks. N. of corner to secs. 1, 2, 35 and 36, which is a sandstone 10x3x18 ins. above ground, set on solid rock in mound of stone, marked and witnessed as described in notes of General Land Office.

Thence from corner of secs. 1, 2, 35 and 36, I run N. 89°06' W. on true line between secs. 2 and 35, through timber.

.03 Set U. S. Forest Reserve Boundary Post No. 13 on solid rock, with mound of stone, 5 ft. base, 3 $\frac{1}{2}$ ft. high, around same, marked

RESERVE in N. W. and N. E. quadrants.

9.00 Dry wash, 5 lks. wide, course S. E.

11.50 Begin ascent, bears N. W. and S. E.

15.50 Top of 50 foot ascent, bears N. W. and S. E.

23.50 Begin descent from south nose of rock cliff, bears N. W. and S. 80° E.

29.50 Wash in ravine, course S. E., base 150 foot descent, bears N. 70° W. and S. 70° E.

33.50 Draw, 10 lks. wide, course S. 80° E., begin ascent, bears N. 80° W. and S. 80° E.

39.03 At the $\frac{1}{4}$ sec. corner between secs. 2 and 35.

Land, mountainous and broken.

Soil, rocky, 4th rate.

Timber, pinion and cedar, small.

At corner of secs. 1, 2, 35 and 36, at 12^h2^m l.m.t. I set off 23°27' N. on the declination arc and observe sun on meridian and obtain reading of 37°48'30" on latitude arc.

From the corner of secs. 1, 2, 35 and 36, I run East on a random retracement line over level plateau through small timber.

39.92 Intersect N. and S. $\frac{1}{4}$ sec. line 147 lks. S. of $\frac{1}{4}$ sec. corner, which is a sandstone 10x3x8 ins. above ground, marked and witnessed as described in notes of General Land Office, with exception of

AQUARIUS FOREST RESERVE BOUNDARY.

South Boundary T. 34 S., R. 1 E.

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|---------|---|
| Chains. | pinion, 10 ins. diam., which bears N. 54° E., 36 lks., instead of |
| | pinion, 10 ins. diam., bears N. 5° E., 36 lks., as called for in notes. |
| | Thence I run |
| | S. 87°54' W. on true line between secs. 1 and 36, ascending, bears N. and S., through timber. |
| 2.00 | Top of ascent 50 ft. above $\frac{1}{4}$ sec. corner, bears |
| | N. and S., thence over level plateau. |
| 39.92 | At corner of secs. 1, 2, 35 and 36. |
| | From $\frac{1}{4}$ sec. corner I run |
| | East on random retracement line between secs. 1 and 36, descending, bears N. and S. |
| 39.08 | Intersect N. and S. range line 4 lks. south of corner of Tps. 34 and 35 S., Rs. 1 and 2 E., which is a sandstone 12x2x20 ins. above ground, marked and witnessed as described in notes of General Land Office. |
| | Thence from township corner above described I run |
| | S. 89°57' W. on true line between secs. 1 and 36, through timber along steep northslope of hill. |
| .03 | I set ¹⁰⁰ U. S. Forest Reserve Boundary Post No. 14, 1 ft. in ground to solid rock and build mound of stone, 4 ft. base, 2 $\frac{1}{2}$ ft. high, around same, for marking of reserve boundary line, marked |
| | RESERVE in N. W. quadrant; no other marking. |
| 16.50 | Begin descent, bears N. 80° E. and S. W. |
| 26.50 | Base of 180 foot descent at ravine, course N. |
| | Begin ascent, bears N. and S. |
| 32.50 | Head of ravine, course N. E. |
| 39.08 | At the $\frac{1}{4}$ sec. corner between secs. 1 and 36. |

June 23, 1904

GENERAL DESCRIPTION.

T. 34 S., R. 1 E., is mountainous, sloping generally to the S. E. from the Aquarius Plateau, which is in the northwest corner. Liston ranch and house lies principally in sec. 32 and is irrigated from Birch Creek and small branch which heads in sec. 1, T. 35 S., R. 1 W.

There are some lands northwest of Liston's which could be cultivated, but owing to water supply could not be settled upon. North Creek runs through the N. E. portion of township and is bold stream of water, though bottoms are narrow and canyon deep and water right is taken below by Riddles Mill, which is at junction of Birch and North Creeks in T. 35 S., R. 2 E. Timber in township is nearly all small, though along creeks and draws is some pine timber large enough for lumber, and an old saw mill was located some years ago about in sec. 30. Very little grass, and township is of little value. The needle and surface indications show presence of iron in sec. 35, though of a poor quality I think, and lying in sandstone formation.

AQUARIUS FOREST RESERVE BOUNDARY.

North through T. 34 S., between Rgs. 1 and 2 E.

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| | June 24: |
| Chains. | From corner of Tps. 34 and 35 S., Rs. 1 and 2 E., Salt Lake Meridian, which is a sandstone 12x2x10 ins. above ground, marked and witnessed as described in notes of General Land Office, at 7 ^h 2 ^m l.m.t., a.m., I set off 37°48'30" on latitude arc and 23°26'30" N. on declination arc and run |
| | North on true line between secs. 31 and 36, through scrubby pine and cedar timber, over rocky mountainous land, gradually descending; magnetic declination 15°57' E. |
| 4.80 | Begin precipitous descent, bears N. 70° W. and S. 70° E., over sandstone ledges. |
| 18.00 | Base of 500 foot descent, bears W. and S. 70° E. |
| 20.20 | Dry branch in canyon, course S. 70° E.; 50 lks. west of this point is forks of canyon from S. W. and from N. W. |
| 22.00 | Begin abrupt ascent, bears N. W. and S. 70° E. |
| 37.30 | Top of rocky cliff 350 ft. above branch, bears N. 60° W. and S. 60° E. Continue ascent. |
| 40.00 | Mark cross (X) on flat sandstone ledge in place for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. side of cross, with mound of stone, 4 ft. base, 3 ft. high, 3 ft. west of corner from $\frac{1}{4}$ corner; from which A cedar, 10 ins. diam., bears N. 36°30' E., 23 lks. dist., marked $\frac{1}{4}$ S 31 B T A pinion, 16 ins. diam., bears S. 66° W., 12 lks. dist., marked RES $\frac{1}{4}$ S 36 B T |
| 42.50 | Dry wash, course S. 20° W. |
| 45.00 | More abrupt ascent, bears N. E. and S. W. |
| 51.50 | Sharp break off at east end of sand rock ledge, bears west 3 lks. |
| 54.50 | Head of same wash, course S. 20° E. |
| 61.00 | Top of ascent on east end of ridge 100 ft. above $\frac{1}{4}$ sec. corner. |
| 66.70 | Begin abrupt descent over ledge, bears N. 40° W. and S. 40° E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 15 in solid rock and build mound of rock, 5 ft. base, 4 ft. high, around same for corner of secs. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. sides, RESERVE on N. W. and S. W. quadrants, T 34 S S 30 on N. E. quadrant, R 2 E S 31 on S. E. quadrant, from which a Pinion, 18 ins. diam., bears N. 48° E., 32 lks. dist., marked T 34 S R 2 E S 30 B T Pinion, 12 ins. diam., bears S. 64° E., 14 lks. dist., marked T 34 S R 2 E S 31 B T Pinion, 12 ins. diam., bears N. 76° W., 52 lks. dist., marked RES T 34 S R 1 E S 25 B T No other trees available. Corner falls on bench on N. E. slope of hill, 250 ft. below summit. Timber, scattering small cedar and pinion. Land, mountainous, rocky ledges, Soil, 4th rate. |

At 2^m6^s after noon l.m.t. I set off 23°25'30" N. on the declination arc and observe the sun on meridian and obtain latitude of 37°49', which agrees with other data.

AQUARIUS FOREST RESERVE BOUNDARY.

North through T. 34 S., between Rs. 1 and 2 E.

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| Chains. | From corner of secs. 25, 30, 31 and 36, I run North on true line between secs. 25 and 30, over rocky mountainous land. |
| .80 | Precipitous descent, bears N. W. and S. E. |
| 7.40 | Road, bears N. 60° W. and S. 60° E., at base of 200 foot descent. |
| 9.30 | North creek, 15 lks. wide, 8 ins. deep, clear fresh water, course S. 60° E. for about 10 chs., then turns more to the south. |
| 15.00 | Begin abrupt rocky ascent, bears N. 60° W. and S. 60° E. |
| 22.05 | Top of 300-foot cliff, bears N. 50° W. and S. 50° E. |
| 32.50 | Dry wash, course S. 20° W. |
| 34.00 | Begin abrupt ascent over sandstone rock ledge, bears E. and W. |
| 38.10 | Top of 150-foot ascent, bears S. 40° W. and S. 60° E. continue gradual ascent. |
| 40.00 | Set sandstone 26x12x5 ins., 18 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A cedar, 10 ins. diam., bears N. 42° E., 87 lks. dist., marked $\frac{1}{4}$ S 30 B T A pinion, 14 ins. diam., bears N. 87° W., 57 lks. dist., marked RES $\frac{1}{4}$ S 25 B T |
| | June 24, 1904. June 25: At 7 ^h 2 ^m a.m., I set off 37°49'30" on latitude arc and 23°25'15" N. on declination arc and continue north. |
| 45.00 | Top of ridge 30 ft. above $\frac{1}{4}$ sec. corner, bears N. 80° E. and W., begin gradual descent. |
| 50.70 | Begin abrupt descent, bears E. and W. |
| 54.00 | Base of rocky descent in gulch, flows E., begin abrupt ascent. |
| 58.70 | Top of 100 ft. ascent, bears E. and W. |
| 65.90 | Vertical ascent of 25 ft. up sand rock ledge, bears N. 80° E. and S. 80° W., continue gradual ascent. |
| 70.50 | Top of east end of 100-foot ridge, begin gradual descent, bears N. W. and S. E. |
| 80.00 | Set, U. S. Forest Reserve Boundary Post No. 16 on solid rock and build mound of stone, 5 ft. base, 4 ft. high, around same, for corner of secs. 19, 24, 25 and 30, marked T 34 S S 19 in N. E. quadrant R 2 E S 30 in S. E. quadrant RESERVE in S. W. and N. W. quadrants, with 2 notches on S. and 4 notches on N. sides, from which A Pinion, .8 ins. diam., bears N. 59°15' E., 35 lks. dist., marked T 34 S R 2 E S 19 B T A pinion, 10 ins. diam., bears S. 79° E., 77 lks. dist., marked T 34 S R 2 E S 30 B T A pinion, 6 ins. diam., bears S. 52° W., 29 lks. dist., marked RES T 34 S R 1 E S 25 B T A pinion, 14 ins. diam., bears N. 77°30' W., 41 lks. dist., marked RES T 34 S R 1 E S 24 B T |
| | Timber, scrubby pine, pinion and cedar. Land, mountainous and precipitous, with canyons cut through sandstone ledges. Soil, rocky, sandy, 4th rate. |

At 12^h2^m19^s l.m.t., I set off 23°24'15" N. on declination arc and observe sun on meridian and obtain a reading of 37°50' on latitude arc, which agrees with other data.

AQUARIUS FOREST RESERVE BOUNDARY.

North through T. 34 S., between Rs. 1 and 2 E.

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| Chains. | From corner of secs. 19, 24, 25 and 30, I run North on true line between secs. 19 and 24, over mountainous land through small timber. |
| .50 | Begin precipitous descent, bears N. W. and S. E. |
| 4.00 | Base of 100 foot descent in ravine, course S. 70° E. Begin abrupt ascent, bears N. 70° W. and S. 70° E. |
| 7.50 | Top of 100 foot ascent, bears E. and S. W. |
| 15.00 | Begin abrupt descent, bears N. W. and S. E. |
| 20.50 | Base of 200 foot descent at ravine, course S. 60° E., begin abrupt ascent, bears N. 60° W. and S. 60° E. |
| 35.80 | Top of cliff 300 ft. above ravine, bears N. 70° W. and S. 50° E.; continue gradual ascent. |
| 40.00 | Set a sandstone 26x10x8 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 18 ins. diam., bears N. 60°30' E., 48 lks. dist., marked $\frac{1}{4}$ S 19 B T A pinion, 14 ins. diam., bears N. 72°30' W., 69 lks. dist., marked RES $\frac{1}{4}$ S 24 B T |
| | June 25, 1904. June 28: At 8 ^h 3 ^m a.m., l.m.t., I set off 37°50'30" on latitude arc and 23°18'15" N. on the declination arc and continue north. |
| 45.00 | Top of ridge, 300 ft. above ravine, bears N. W. and S. E., thence along E. slope of ridge. Strong local attraction of the magnetic needle along this ridge. |
| 53.00 | Begin descent, bears W. and S. E. |
| 62.50 | Base of 80-foot descent, bears E. and S. W. Draw, course S. W. |
| 64.00 | Draw, course S. 20° E. |
| 72.00 | Draw, course S. 20° W. Begin ascent, bears N. 20° E. and S. 20° W. |
| 80.00 | Top of 100-foot ascent on round butte. Set U. S. Forest Reserve Boundary Post No. 17, 1 foot in ground to solid rock and build mound of stone 5 ft. base, 3 $\frac{1}{2}$ ft. high around same, for corner of secs. 13, 18, 19 and 24, marked RESERVE in N.E., N.W. and S.W. quadrants, T 34 S R 2 E S 19 in S. E. quadrant, with 3 notches on north and south sides, from which A pinion, 10 ins. diam., bears N. 38°45' E., 30 lks. dist., marked RES T 34 S R 2 E S 18 B T A pinion, 12 ins. diam., bears S. 42°30' E., 56 lks. dist., marked T 34 S R 2 E S 19 B T A pinion, 8 ins. diam., bears S. 32°15' W., 44 lks. dist., marked RES T 34 S R 1 E S 24 B T A pinion, 10 ins. diam., bears N. 75° W., 27 lks. dist., marked RES T 34 S R 1 E S 13 B T Much local attraction in this latter half of this mile and rock shows iron stain. Timber, small cedar and pine. Land, mountainous and hilly. Soil, rocky and sandy, 4th rate. |

At last described corner at 12^h3^m l.m.t., I set off 20°17'15" N. on the declination arc and observe sun on meridian and obtain a reading on latitude arc of 37°51', which agrees with other data.

ACUARIUS FOREST RESERVE BOUNDARY.

Through T. 34 S., R. 2 E.

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| Chains. | From corner of secs. 13, 18, 19 and 24 of T. 34 S., Rs. 1 and 2 E., I run East on true line through small pinion and cedar timber over rolling rocky land. |
| 1.50 | Begin descent, bears N. and S. W. |
| 5.00 | Base of 50+ foot descent at draw, course S. 20° W., begin gradual ascent. |
| 15.00 | Top of 50-foot ascent, bears N. 20° W. and S. 20° E. Begin gradual descent. |
| 33.70 | Base of 200-foot descent, bears N. W. and S. E. Ravine, course S. E. |
| 36.30 | Draw, 10 lks. wide, course S. 20° E.; begin ascent, bears N. 20° W. and S. 20° E. |
| 39.13 | (The theoretical distance allowing for convergency from the 7th Standard Parallel South). Set a sandstone 18x8x4 ins., 6 ins. in the ground to solid rock and build mound of stone around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which |
| | A pinion, 18 ins. diam., bears N. 50° W., 18 lks. dist., marked RES $\frac{1}{4}$ S 18 B T |
| | A pinion, 14 ins. diam., bears S. 21° E., 77 lks. dist., marked $\frac{1}{4}$ S 19 B T |
| 39.50 | Side hill wash, course S. W., with a 20-foot wall on west side. |
| 57.50 | Top of 150 ft. ascent, bears N. and S. 20° E. |
| 62.00 | Begin abrupt descent, bears N. 20° W. and S. E. |
| 64.00 | Draw, course N., at base of 50-foot descent, begin ascent, bears N. E. and S. W. |
| 69.70 | Top of 50 foot ascent on north slope of spur. |
| 70.50 | Begin abrupt descent, bears N. W. and S. 70° E. |
| 76.00 | Base of 100 foot descent, in open flat, bears N. 80° W. and S. 80° E. |
| 79.13 | Set iron U. S. Forest Reserve Boundary Post No. 18 1 foot in ground to solid rock and build mound of stone, 4 ft. base, 3 ft. high, around same for corner of secs. 17, 18, 19 and 20, marked |
| | RESERVE in N. W. and N. E. quadrants, |
| | R 2 E S 20 in S. E. quadrant, |
| | T 34 S S 19 in S. W. quadrant, with 3 notches on south and 5 on east sides, from which |
| | A pinion, 12 ins. diam., bears N. 85° E., 49 lks. dist., marked RES T 34 S R 2 E S 17 B T |
| | A pinion, 8 ins. diam., bears S. 76° E., 78 lks. dist., marked T 34 S R 2 E S 20 B T |
| | A pinion, 12 ins. diam., bears S. 72° W., 102 lks. dist., marked T 34 S R 2 E S 19 B T |
| | No other trees available. |
| | Timber, small cedar and pinion. |
| | Land, hilly and mountainous. |
| | Soil, rocky and sandy, 4th rate. |
| | Too much local attraction to determine magnetic declination. |
| | June 28, 1904. |
| | June 29: From corner of secs. 17, 18, 19 and 20, at 7 ⁴⁵ a.m., I set off 37°51' on latitude arc and 23°15'45" N. on the declination arc and run east on true line between secs. 17 and 20, through north edge of timber skirting aspen flat which lies on the north. |
| 3.77 | Pinion tree, 12 ins. diam., on line, I mark with two notches on E. and W. sides. |
| 4.90 | Small wash, 10 lks. wide, course S. 60° E. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 E.

| Chains. | |
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| 8.30 | Same wash, course N. E. into flat. |
| 15.90 | Leave timber, enter open sage brush flat, bears N. 85° W. and S. 85° E. |
| 37.80 | Wash, 10 lks. wide, 10 ft. deep in open flat, course S. |
| 40.00 | Set a sandstone 20x14x8 ins. 15 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which <ul style="list-style-type: none"> A pine, 28 ins. diam., bears N. 6°30' E., 242 lks. dist., marked RES $\frac{1}{4}$ S 17 B T No other trees available; dig pits 18x18x12 ins., 3 ft. E. and W. of stone, and raise mound of earth 3 ft. base, $1\frac{1}{2}$ ft. high N. of corner. |
| 43.40 | Leave open flat, enter timber, and begin ascent, bears N. and S. |
| 54.37 | 40-foot vertical ascent, bears N. and S. Seap spring of alkali water at base of ledge, bears N. 50 lks. dist., and drain to the W. |
| 65.00 | Top of 150 foot ascent, bears N. 20° W. and S. 20° E., thence across level timbered plateau. |
| 78.20 | Head of ravine, course S. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 19 on solid rock, with mound of stone, 5 ft. base, $3\frac{1}{2}$ ft. high, around same, for corner of secs. 16, 17, 20 and 21, marked <ul style="list-style-type: none"> RESERVE in N. E. and N. W. quadrants, R 2 E S 21 in S. E. quadrant, T 34 S S 20 in S. W. quadrant, with 3 notches on S. and 4 on E. sides, from which A double pinion, 10 ins. diam., bears N. 55° E., 22 lks. dist., marked RES T 34 S R 2 E S 16 B T A pinion, 12 ins. diam., bears S. 64°30' E., 109 lks. dist., marked T 34 S R 2 E S 21 B T A cedar, 14 ins. diam., bears S. 57° W., 92 lks. dist., marked T 34 S R 2 E S 20 B T A pinion, 14 ins. diam., bears N. 69° W., 48 lks. dist., marked RES T 34 S R 2 E S 17 B T |
| | Timber, small cedar, pinion and pine. |
| | Land, level and mountainous. |
| | Soil, 3rd and 4th rate. |

At corner of secs. 16, 17, 20 and 21, at 12h3m38^s, l.m.t., I set off 23°14'15" N. on the declination arc and observe sun on meridian and obtain a reading of 37°51' on latitude arc, which agrees with other data.

From corner of secs. 16, 17, 20 and 21, T. 34 S., R. 2 E., I run

East on true line, magnetic declination 16°10' E., over level timbered plateau.

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| 12.00 | Begin abrupt descent, bears N. and S. 20° E. |
| 17.50 | Base of 70 foot descent, bears N. 20° W. and S. 20° E.; leave timber, enter sage flat, same bearing. |
| 19.40 | Draw, 4 lks. wide, 20 ft. deep, with 6-inch stream of alkali and iron water, course S. E. |
| 21.20 | Leave sage flat, enter timber and begin ascent, bears N. W. and S. E. |
| 29.00 | Top of 100 foot ascent on south slope of spur. |
| 30.00 | Begin descent, bears N. 20° E. and S. 80° W. |
| 35.20 | Base of 70-foot descent at draw, 10 lks. wide, course S.; begin ascent, bears N. and S. 20° E. |
| 39.90 | Top of 50-foot ascent, on south slope of spur. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 E.

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| Chains | |
| 40.00 | Set a sandstone 22x12x8 ins. 8 ins. in the ground to solid rock and build mound of stone around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which A cedar, 20 ins. diam., bears N. 4°30' W., 46 lks. dist., marked RES $\frac{1}{4}$ S 16 B T A pinion, 8 ins. diam., bears S. 37° 30' W. 39 lks. dist., marked $\frac{1}{4}$ S 21 B T |
| 40.20 | Begin descent, bears N. 20° E. and S. 20° W. |
| 49.00 | Base of 110-foot descent and leave timber, enter sage flat, bears N. 20° E. and S. 20° W. |
| 53.00 | Leave sage flat, enter timber and begin ascent, bears N. 20° E. and S. 20° W. |
| 60.00 | Top of 80-foot ascent, bears N. 20° E. and S. 20° W. |
| 62.68 | Begin descent over 50-foot vertical ledge, bears N. 20° E. and S. 20° W. |
| 71.30 | Base of 200-foot descent at draw, 10 lks. wide, course S. 20° W., begin ascent, bears N. 50° E. and S. 20° W. At this draw formation changes from sandstone to black trachite and lava boulder formation. |
| 77.30 | Top of 50-foot ascent, bears N. 20° E. and S. 20° W., thence along level bench. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 20 18 ins. in the ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 15, 16, 21 and 22, marked RESERVE in N. E. and N. W. quadrants, R 2 E S 22 in S. E. quadrant, T 34 S S 21 in S. W. quadrant, with 3 notches on S. and 3 on E. sides, from which A pinion, 12 ins. diam., bears N. 72° E., 27 lks. dist., marked RES T 34 S R 2 E S 15 B T A pinion, 8 ins. diam., bears S. 62°30' E., 33 lks. dist., marked T 34 S R 2 E S 22 B T A pinion, 8 ins. diam., bears S. 46° W., 115 lks. dist., marked T 34 S R 2 E S 21 B T A pinion, 10 ins. diam., bears N. 14°30' W., 52 lks. dist., marked RES T 34 S R 2 E S 16 B T Timber, small pinions, cedar and pine. Land, mountainous and broken. Soil, rocky and sandy, 4th rate. |

June 29, 1904

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| | June 30: From corner of secs. 15, 16, 21 and 22, T. 34 S., R. 2 E., at 7 ^h 3'20" l.m.t., I set off 37°51' On the latitude arc and 23°12'30" N. on the declination arc, and run East on true line between secs. 15 and 22, through small pinion and cedar timber, over hilly land covered with trachite boulders, magnetic declination 16°20' E. Ascending, bears N. and S. |
| 3.00 | Small draw, 10 lks. wide, course S. W. |
| 21.28 | Top of ascent, 150 ft. above sec. corner, on south slope of ridge; begin abrupt descent, bears N. 20° E. and S. 20° W. At this point I erect a signal for test sight from the east. |
| 23.50 | Base of 50-foot descent at draw, course S.; begin ascent, bears N. and S. |
| 34.00 | Top of 50-foot ascent and begin descent over 50-foot vertical sandstone ledge, bears N. 20° E. and S. 20° W. |
| 39.90 | Base of 90-foot descent at draw, course S.; begin gradual ascent, bears N. W. and S. E. |
| 40.00 | Set trachite boulder 18x12x8 ins., 12 ins. in the |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 E.

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| Chains | ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which |
| | A cedar, 14 ins. diam., bears N. $10^{\circ}30'$ E., 51 lks. dist., marked RES $\frac{1}{4}$ S 15 B T |
| | A cedar, 12 ins. diam., bears S. 50° E., 10 lks. dist., marked $\frac{1}{4}$ S 22 B T |
| 47.50 | Draw, 10 lks. wide, course S. 20° W. |
| 54.00 | Top of 40 foot ascent, on south slope of spur; thence over rolling surface, along south slope of spur. |
| 61.00 | Draw, 8 lks. wide, course S. |
| 64.00 | Strong local attraction. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 21, 18 ins. in the ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same, for corner of secs. 14, 15, 22 and 23, marked RESERVE in N. E. and N. W. quadrants, R 2 E S 23 in S. E. quadrant T 34 S S 22 in S. W. quadrant, with 3 notches on south and 2 on east sides, from which |
| | A cedar, 12 ins. diam., bears N. $46^{\circ}30'$ E., 74 lks. dist., marked RES T 34 S R 2 E S 14 B T |
| | A cedar, 14 ins. diam., bears S. 29° E., 19 lks. dist., marked T 34 S R 2 E S 23 B T |
| | A pinion, 8 ins. diam., bears S. 45° W., 73 lks. dist., marked T 34 S R 2 E S 22 B T |
| | A cedar, 10 ins. diam., bears N. 30° W., 14 lks. dist., marked RES T 34 S R 2 E S 15 B T |
| | Timber, scrubby cedar, pinion and pine. |
| | Land, mountainous, broken and rolling. |
| | Soil, rocky and sandy, 4th rate. |

At this corner at $12^{\text{h}}3^{\text{m}}20^{\text{s}}$ l.m.t. I set off $23^{\circ}11'$ N. on the declination arc and observe sun on the meridian and obtain a reading of $37^{\circ}51'$ on latitude arc, which agrees with other data.

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| | From corner of secs. 14, 15, 22 and 23, T. 34 S., R. 2 E., I run |
| | East on true line between secs. 14 and 23, over rolling rocky land, through timber. |
| 5.00 | Begin gradual descent, bears N. E. and S. W. |
| 39.70 | Draw, 10 lks. wide, course S. E. |
| 40.00 | Set trachyte boulder $18 \times 10 \times 8$ ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which |
| | A pinion, 20 ins. diam., bears N. $48^{\circ}15'$ W., 53 lks. dist., marked RES $\frac{1}{4}$ S 14 B T |
| | A pinion, 18 ins. diam., bears S. 22° E., 15 lks. dist., marked $\frac{1}{4}$ S 23 B T |
| 42.50 | Base of 250 foot descent, bears N. 20° W. and S. 20° E. Draw, 15 lks. wide, course S. 20° E., begin ascent, bears N. 20° W. and S. 20° E. |
| 47.50 | Side hill wash, course S. W. |
| 60.00 | Top of 120-foot ascent, bears N. and S., thence over rolling land. |
| 67.00 | Draw, 10 lks. wide, course S. W.; begin gradual ascent, bears N. and S. W. |
| 71.50 | Draw, 10 lks. wide, course S. 60° W. |
| 76.50 | Top of 180-foot ascent, bears N. and S. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 22, $2\frac{1}{2}$ ft. in ground, with mound of stone, 3 ft. base, 1 ft. high around same, for corner of secs. 13, 14, 23 and 24, marked RESERVE on N.E. and N. W. quadrants, |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 E.

Chains.

R. 2 E., S. 24 in S. E. quadrant,
T. 34 S., S. 23 in S. W. quadrant, with 3
notches on south and 1 on east sides, from which
A pinion, 10 ins. diam., bears N. 85° E., 94
lks. dist., marked RES T 34 S R 2 E S 13
B T
A pinion, 8 ins. diam., bears S. 65° E., 16
lks. dist., marked T 34 S R 2 E S 24 B T
A cedar, 10 ins. diam., bears S. 19°30' W.,
39 lks. dist., marked T 34 S R 2 E S 23
B T
A pinion, 8 ins. diam., bears N. 32°30' W.,
103 lks. dist., marked RES T 34 S R 2 E
S 14 B T

Timber, scrubby pinion, cedar and pine.

Land, mountainous and rocky.

Soil, sandy and rocky, 4th rate.

June 30, 1904.

July 1:

From corner of secs. 13, 14, 23 and 24, at 7^h51^m
a.m., I set off 37°51' on latitude arc and
23°08'30" N. on declination arc and run
East on true line between secs. 13 and 24, magnet-
ic declination 16°30' E., through small timber,
over rolling land, gradually ascending, bears
N. and S.

10.00

Top of gradual ascent, 30 ft. above sec. corner,
bears N. and S. Thence over level surface.

32.50

Begin descent, bears N. and S. 20° E.

40.00

Set trachyte boulder 20x10x8 ins., 15 ins. in the
ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face,
from which

A cedar, 10 ins. diam., bears N. 39° W., 19
lks. dist., marked RES $\frac{1}{4}$ S 13 B T

A pinion, 10 ins. diam., bears S. 30° E., 65
lks. dist., marked $\frac{1}{4}$ S 24 B T

Corner falls on N. E. slope, 150 ft. below summit.

69.00

Draw, 10 lks. wide, course N. 70° E.

80.00

Set ^{Post} U. S. Forest Reserve Boundary Post No. 23, 2
ft. in ground, and build mound of stone, 3 ft.
base, 1 $\frac{1}{2}$ ft. high, around same for corner of
secs. 13, 18, 19 and 24, marked
RESERVE in N. E. and N. W. quadrants,
R 3 E S 19, in S. E. quadrant,
T 34 S R 2 E S 24 in S. W. quadrant, with 3
notches on N. and S. sides, from which

A pinion, 10 ins. diam., bears N. 75° E., 26
lks. dist., marked RES T 34 S R 3 E S 18
B T

A pinion, 10 ins. diam., bears S. 63°30' E.,
89 lks. dist., marked T 34 S R 3 E S 19
B T

A pinion, 12 ins. diam., bears S. 34° W., 15
lks. dist., marked T 34 S R 2 E S 24 B T

A pinion, 8 ins. diam., bears N. 36° W., 77
lks. dist., marked RES T 34 S R 2 E S 13
B T

Corner-falls on E. slope, 650 ft. below summit and
about 40 ft. above Pine Creek on the east.

Timber, scrubby pinion, cedar and pine.

Land, mountainous and broken.

Soil, rocky and sandy, 4th rate.

At this corner at 12^h35^m51^s l.m.t., I set off 23°07'
N. on declination arc and observe sun on merid-
ian and obtain a reading of 37°51' on latitude
arc, which agrees with other data.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 E.

GENERAL DESCRIPTION.

T. 34 S., R. 2 E., is rough, mountainous land, cut up with canyons, with steep sand cliff walk. North Creek cuts off the southwest corner and is fresh pure water. No other water in township, except for small alkaline springs. Timber is of inferior growth, consisting of scrubby pinion and juniper with some few scattering pine along draws and on top of level plateau. Formation, principally sandstone, with ridges of trachyte running into northeast corner and through east edge. Some few open hollow draws which are susceptible of cultivation if water could be supplied.

T. 34 S., R. 3 E.

- From corner of secs. 13, 18, 19 and 24 of T. 34 S., Rs. 2 and 3 E., I run
East on true line through timber, descending,
bears N. 30° W. and S. 30° E.
2.00 Base of descent, 30 ft. below sec. corner, bears
N. 30° W. and S. 30° E.
3.40 Road, bears N. 30° W. and S. 30° E.
5.50 Pine Creek, 50 lks. wide between banks, 10 ft.
deep, flows stream of fresh water, 10 lks. wide,
3 ins. to 6 ins. deep, course S. 30° E.
10.55 Begin very abrupt ascent, bears N. 30° W. and
S. 30° E., over inclined sandstone ledges.
21.00 Ravine, 50 ft. deep, course S. 80° W.
39.13 Allowing for convergency, the point for $\frac{1}{4}$ sec. corner
falls on shelving sandstone ledge, dipping to
S. W., on which I cut cross (X) at the exact
point for $\frac{1}{4}$ sec. corner, mark $\frac{1}{4}$ on N. side of
cross, from which
A pinion, 12 ins. diam., bears N. 73° E., 40
lks. dist., marked RES $\frac{1}{4}$ S 18 B T
A pinion, 16 ins. diam., bears S. 37° 30' W.,
92 lks. dist., marked $\frac{1}{4}$ S 19 B T
July 1, 1904
July 2:
47.50 Ravine, 50 ft. deep, course S. 20° W.
58.00 Head of ravine, course S.
70.00 Ravine, 60 ft. deep, course S. 20° W.
79.13 Set sandstone 24x10x6 ins., 6 ins. in ground, to
solid rock and build mound of stone, 3 ft. base,
 $1\frac{1}{2}$ ft. high, around same for corner of secs. 17,
18, 19 and 20, marked with 3 notches on south
and 5 on east faces (Note: Not practical to set
iron post), from which
A double pine, 20 ins. diam., bears N. 14° E.,
58 lks. dist., marked RES T 34 S R 3 E
S 17 B T
A pine, 20 ins. diam., bears S. 49° W., 63
lks. dist., marked T 34 S R 3 E S 19 B T
A pine, 12 ins. diam., bears N. 54° W., 159
lks. dist., marked RES T 34 S R 3 E S 18
B T
No other trees available.
Corner falls on small bench on west slope of cliff
at 1000 ft. above Pine Creek.
Timber, scattering pinion, pine and cedar.
Land, mountainous and precipitous, sand cliffs.
Soil, sandy in pine creek bottom, 4th rate.
Practically no soil in balance of mile.

From corner of secs. 17, 18, 19 and 20 of T. 34 S.,

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.,

| | |
|---------|--|
| Chains. | R. 3 E., at 10 ^h 3 ^m 45 ^s a.m., I set off 37°51' on latitude arc and 23°3'15" N. on the declination arc, and run |
| 3.55 | East on true line between secs. 17 and 20, ascending precipitous rock cliff, bears N. W. and S. Top of cliff 400 ft. above sec. corner, bears N. 20° W. and S. 70° E. From this point white church in town of Escalante bears S. 2°34' E. |
| 5.90 | I set iron U. S. Forest Reserve Boundary Post No. 24, in solid rock and build mound of stone around same 5 ft. base, 3½ ft. high, for marking of boundary line, marked RESERVE in N.E. and N. W. quadrants, no other markings, from which A pine, 20 ins. diam., bears N. 25° E., 59 lks. dist., marked RESERVE B P No. 24 B T A pine, 16 ins. diam., bears N. 25°30' W., 107 lks. dist., marked RESERVE B P No. 24 B T |
| 15.00 | Rocky wash, course S. 60° W. |
| 30.00 | Top of 50-foot gradual ascent, bears N. and S. |
| 40.00 | Set sandstone 20x14x5 ins., 15 ins. in the ground, for ¼ sec. corner, marked ¼ on N. face, from which A pine, 20 ins. diam., bears N. 60° W., 103 lks. dist., marked RES ¼ S 17 B T A pine, 20 ins. diam., bears S. 73°30' W., 22 lks. dist., marked ½ S 20 B T |
| 45.00 | Begin descent, bears N. and S. 20° E. |
| 79.00 | Precipitous descent, bears N. 20° W. and S. 60° E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 25, in solid sandstone ledge and build mound of stone, 5 ft. base, 3½ ft. high, around same for corner of secs. 16, 17, 20 and 21, marked RESERVE in N. W. and N. E. quadrants, R 3 E S 21 in S. E. quadrant, T 34 S S 20 in S. W. quadrant, with 4 notches on East and 3 on south sides, from which A pinion, 10 ins. diam., bears N. 20° E., 135 lks. dist., marked RES T 34 S R 2 E S 16 B T A pinion, 12 ins. diam., bears S. 7°30' E., 123 lks. dist., marked T 34 S R 3 E S 21 B T A pinion, 14 ins. diam., bears S. 35° W., 68 lks. dist., marked T 34 S R 3 E S 20 B T No other trees available. Corner falls on rocky E. slope 250 ft. below summit. Timber, pine, pinion and small cedar. Land, level and mountainous. Soil, sandy disintegrated rock, 4th rate. |

July 2, 1904.

Note: At point 5.90 chs. E. of corner of secs. 17, 18, 19 and 20, I set up instrument over iron post No. 24, and at 7.15 p.m., direct telescope to signal established June 30, between secs. 15 and 22, T. 34 S., R. 2 E., and note reading of verniers as follows:

Vernier A = 0°00'

" B = 179°59'

Unclamp plate and at 7^h35^m30^s p.m., l.m.t., July 2, direct telescope to Polaris and read verniers as follows:

Vernier A = 90°19'

" B = 89°41'

making mean angle between signal and the star = 90°18'30"

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.

Chains. Time obs., 7^h35^m
 L. C. July 2, $6^h42.3$
 Hour angle, 53.2^m in latitude $37^\circ51'$
 Azimuth of Polaris at observation
 from Table VII $0^\circ21'$
 Observed bearing of signal = $90^\circ18\frac{1}{2}' - 0^\circ21'$
 = $N.89^\circ57\frac{1}{2}' W.$
 Theoretical bearing $3\frac{3}{4}$ inch = $N.89^\circ57'27'' W.$

Error, $0^\circ 0'03''$
 July 2, 1904

July 10: at $5^h5^m48^s$ p.m., l.m.t., at camp, near
 corner of secs. 16, 17, 20 and 21, I set off
 $37^\circ51'$ on the latitude arc and $22^\circ13'30'' N.$ on
 the declination arc and establish meridian with
 solar, and mark same by hub set 5 chs. N. of my
 station.

At 10^h45^m p.m., l.m.t., I observe Polaris according
 to Manual instructions and mark direction thus
 determined by hub 5.00 chs. N. of my station.

U. C. Polaris July 1, $18^h44.2^m$
 Reduction to July 10, -35.2
 U. C. July 10, 18^h09^m
 Time of observation, 10^h45^m
 Hour angle and time argument, 7^h24^m in
 Latitude $37^\circ51'$ gives azimuth $1^\circ24.4'$

July 10, 1904.

July 11: At 7 a.m. I set off the azimuth of Polaris
 $1^\circ24.4'$ to the west and find meridian thus estab-
 lished coincides with meridian with solar yester-
 day p.m.

At 7^h05^m a.m., l.m.t., I set off $37^\circ51'$ on latitude
 arc and $22^\circ08'45'' N.$ on the declination arc and
 find meridian thus determined with solar agrees
 with true meridian previously determined.

At corner of secs. 16, 17, 20 and 21 at $9^h05^m15^s$
 a.m., l.m.t., I set off $37^\circ51'$ on latitude arc
 and $22^\circ07'15'' N.$ on the declination arc and es-
 tablish meridian with the solar, which gives mag-
 netic declination of $16^\circ16' E.$

Thence I run

East on true line between secs. 16 and 21, through
 scattering timber, descending, bears N. and S.,
 over rough broken surface.

5.00 Draw, 10 lks. wide, course N. E., at base of descent
 200 ft. below sec. corner; thence gradually de-
 scending along steep N. slope of sandstone cliff.

40.00 At true point for $\frac{1}{4}$ sec. corner mark cross (X) with
 $\frac{1}{4}$ on N. side on bare rock surface, for $\frac{1}{4}$ sec. cor-
 ner, and build mound of stone, 3 ft. base, 2 ft.
 high, north of same, from which

A pinion, 8 ins. diam., bears N. $5^\circ30' E.$, 66
 lks. dist., marked RES $\frac{1}{4}$ S 16 B T

A pinion, 10 ins. diam., bears S. $20^\circ W.$, 320
 lks. dist., marked $\frac{1}{4}$ S 21 B T

42.50 Begin precipitous descent, bears N. $80^\circ W.$ and
 S. $80^\circ E.$

60.00 Dry branch, 20 lks. wide, in canyon, course S. $80^\circ E.$
 Base of descent, 600 ft. below sec. corner; begin
 precipitous ascent, bears N. $80^\circ W.$ and S. $80^\circ E.$

66.00 Top of canyon wall 200 ft. above branch, thence
 continue ascent, bears N. $80^\circ W.$ and S. $80^\circ E.$

80.00 Cut cross (X), with 3 notches on E. and 3 notches
 on S. side of same, on solid bare rock surface,
 over which I set $\frac{1}{4}$ U. S. Forest Reserve Boundary
 Post No. 26 on solid rock and build mound of
 stone, 5 ft. base, $3\frac{1}{2}$ ft. high, around same for

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.

Chains.

corner of secs. 15, 16, 21 and 22, marked
T. 34 S S 15 in N. E. quadrant,
R 3 E S 22 in S. E. quadrant,
S 21 in S. W. quadrant,
RESERVE, S 16 in N. W. quadrant, with 3 notches
on E. and S. sides, from which
A pine, 20 ins. diam., bears N. 50°30' W., 542
lks. dist., marked RES T 34 S R 3 E S 16
B T

No other trees available.

Six feet north of corner I build a witness mound
of stone 5 ft. base, 3 ft. high. Corner falls on
S. slope of bare rock hill 300 ft. above branch.
Land, mountainous and precipitous.
Bare rock surface with no soil.
Some scattering pine and pinion timber growing in
rock crevases.

At the $\frac{1}{4}$ sec. corner between secs. 16 and 21 I set
off 22°06' N. on declination arc, and at 12^h54^m,
l.m.t., observe sun on meridian and obtain a
reading of 37°51' on the latitude arc.

Note: The corner of secs. 15, 16, 21 and 22 and
all iron post corners in future are marked with
appropriate township, range and section in quad-
rants within reserve, as well as quadrants out-
side, together with "RESERVE" in appropriate
quadrant. This change made by personal order of
Mr. A. F. Dunnington, topographer.

From corner of secs. 15, 16, 21 and 22, I run
N. 0°02' W. on true line between secs. 15 and 16,
ascending, bears N. 80° W. and S. 80° E., over
bare rock surface.

- 2.50 Top of ascent, bears N. W. and E., 50 ft. above
sec. corner; begin descent, bears N. W. and E.
- 10.50 Base of 100 ft. descent at dry wash, 10 lks. wide,
course N. 80° E. Begin abrupt ascent, bears
N. 80° E. and S. 80° W.
- 14.00 Top of 120 ft. ascent, bears N. E. and S. 80° W.,
on east side of bare rock butte.
- 17.50 Begin abrupt descent, bears N. 80° W. and S. 80° E.
- 25.20 Base of 200-foot descent at ravine, 20 lks. wide,
course S. 80° E. Begin ascent, bears N. 80° W.
and S. 80° E.
- 28.40 Top of 80-foot ascent, bears E. and W. At this
point I build mound of stone, 3 ft. base, 2 $\frac{1}{2}$
ft. high, for boundary line marking, on prominent
summit.
- 28.80 Begin precipitous descent, bears E. and W.
- 30.00 Base of 150-foot descent at draw, 15 lks. wide,
course E., begin gradual ascent, bears E. and W.
- 39.60 Top of 40 foot ascent, bears N. E. and W.
- 40.00 True point for $\frac{1}{4}$ sec. corner falls on sandstone
ledge in place, upon which I mark cross (+) with
 $\frac{1}{4}$ on W. side of same at exact point for $\frac{1}{4}$ sec.
corner and build mound of stone, 3 ft. base,
2 ft. high, 2 ft. west of cross, from which
A pine, 22 ins. diam., bears N. 71°30' E., 243
lks. dist., marked $\frac{1}{4}$ S 15 B T
A pinion, 8 ins. diam., bears S. 76°30' W., 84
lks. dist., marked RES $\frac{1}{4}$ S 16 B T

July 11, 1904.

July 12: At 7^h05^m5^s a.m., l.m.t., I set off 37°51'30"
on latitude arc and 22°00'45" N. on the declina-

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.

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| Chains. | tion arc, and continue N. 0°02' W. between secs. 15 and 16. |
| 40.04 | Begin abrupt descent, bears N. 20° W. and S. 20° E. |
| 46.50 | Base of 40-foot descent at dry branch, 20 lks. wide, course S. 20° E. Begin abrupt ascent, bears N. 80° W. and S. 80° E. |
| 56.20 | Ravine, 50 ft. deep, course S. 80° W. |
| 67.00 | Draw, 20 ft. deep, course N. 80° W. |
| 70.00 | Draw, 10 lks. wide, 20 ft. deep, course W. |
| 73.57 | Backbone of sharp ledge, bears E. and W., 90 ft. high. |
| 74.00 | Ravine, 50 ft. deep, course W. |
| 78.05 | Set U. S. Forest Reserve Boundary Post No. 27 over cross (+) on bare rock, around which I build mound of stone, 5 ft. base, 3½ ft. high, for witness corner to corner of secs. 9, 10, 15 and 16, marked W C on top of cap, T 34 S S 10 in N. E. quadrant R 3 E S 15 in S. E. quadrant RESERVE S 16 in S. W. quadrant RESERVE S 9 in N. W. quadrant, with 3 notches on E. and 4 notches on S. sides, from which A pinion, 5 ins. diam., bears N. 50° W., 113 lks. dist., marked RES. W C T 34 S R 3 E S 9 B T A pinion, 4 ins. diam., bears S. 83° W., 29 lks. dist., marked RES W C T 34 S R 3 E S 16 B T |
| | Witness corner falls on bare rock summit of ridge, bearing N. 80° W. and S. 80° E., about 600 ft. above branch. No other trees available. |
| 79.00 | Head of ravine, 50 ft. deep, course S. 70° E. |
| 80.00 | Point for sec. corner falls on north rock wall of ravine at a point too steep to set post. Land, broken and precipitous. Timber, pine and pinion along draws and in rock crevasses. Surface, bare rock. |

At this corner I set off 21°58' N. on the declination arc and at 12^h05^m15^s l.m.t., observe sun on meridian and obtain reading of 37°52' on latitude arc.

From the true point for corner of secs. 9, 10, 15 and 16, which is 1.95 chs. N. of W. C., I run N. 0°02' W. on true line between secs. 9 and 10, ascending abruptly N. 70° W. and S. 70° E., over bare sand rock surface.

| | |
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| 3.25 | Top of ascent, 50 ft. above sec. corner on summit of rock ridge, bears N. 80° W. and E., begin abrupt descent. |
| 18.70 | Base of 500-foot descent at draw, 20 lks. wide, course S. 80° E.; begin gradual ascent, bears N. 80° W. and S. 80° E.; begin gradual ascent, bears N. 80° W. and S. 80° E. |
| 36.80 | Top of 120-foot ascent, bears E. and W. |
| 37.40 | Begin descent, bears E. and W. |
| 39.90 | Base of 100-foot descent, bears N. 70° W. and S. 70° E. |
| 40.00 | Set sandstone 28x16x10 ins., 22 ins. in the ground, for ¼ sec. corner marked ¼ on W. face, from which A pine, 20 ins. diam., bears N. 78° W., 21 lks. dist., marked RES ¼ S 9 B T A pine, 18 ins. diam., bears N. 89° E., 36 lks. dist., marked ¼ S 10 B T |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.

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| Chains. 41.70 45.50 51.50 63.20 65.00 80.00 | <p>Draw, 10 lks. wide, course S. 70° E.; begin ascent, bears N. 70° W. and S. 70° E.</p> <p>Top of 80-foot ascent, bears N. 70° W. and S. 70° E.; begin descent, bears N. 70° W. and S. 70° E.</p> <p>Base of 50-foot descent at draw, course S. 70° E.; begin ascent, bears N. 70° W. and S. 70° E.</p> <p>Top of 100-foot ascent, bears N. 70° W. and S. 70° E.; begin abrupt descent, bears N. 70° W. and S. 70° E.</p> <p>Ravine, course S. 70° E., at base of 200-foot descent; begin ascent, bears N. 70° W. and S. 70° E.</p> <p>Falls on bare sandstone surface, at exact point for corner I mark cross (+) on rock, with 3 notches on E. and 5 on S. sides of cross, over which I set U. S. Forest Reserve Boundary Post No. 28 on solid rock and build mound of stone, 5 ft. base, 3½ ft. high, around same for corner of secs 3, 4, 9 and 10, marked T 34 S S 3 in N. E. quadrant, R 3 E S 10 in S. E. quadrant, RESERVE S 9 in S. W. quadrant, RESERVE S 4 in N. W. quadrant, with 3 notches on E. and 5 notches on S. sides, from which A pine, 10 ins. diam., bears N. 36° W., 276 lks. dist., marked RES T 34 S R 3 E S 4 B T No other trees available. Corner falls on S. slope of bare sandstone ridge, 200 ft. above ravine. Land, precipitous and broken. Timber, scattering pinion and pine in crevasses and ravines. Surface, bare sand rock.</p> |
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July 12, 1904.

July 13: At corner of secs. 3, 4, 9 and 10, T. 34 S., R. 3 E., at 8^h05^m15^s a.m., l.m.t., I set off 37°53' on the latitude arc and 21°51' N. on the declination arc and determine true meridian. Magnetic declination 16°40' E.

Thence I run
N. 0°02' W. on true line between secs. 3 and 4, over bare rock surface, ascending, bears N. 80° E. and W.

| | |
|---|---|
| 3.00 8.00 13.00 13.50 25.00 40.00 47.00 47.10 55.00 | <p>Top of ascent 40 ft. above sec. corner, bears E. and W.</p> <p>Begin abrupt descent, bears N. 70° W. and S. 70° E.</p> <p>Base of 150-foot descent, bears N. 70° W. and S. 70° E.</p> <p>Draw, 10 lks. wide, course S. 70° E.; begin abrupt ascent, bears N. 70° W. and S. 70° E.</p> <p>Top of 200-foot ascent, bears E. and W.; begin descent.</p> <p>Corner falls on bare sandstone surface. I cut a cross (+) at the exact corner point and mark ¼ on W. side of same for ¼ sec. corner, from which A pine, 10 ins. diam., bears N. 38°30' W., 63 lks. dist., marked RES ¼ S 4 B T A pine, 8 ins. diam., bears S. 27°30' E., 97 lks. dist., marked ¼ S 3 B T</p> <p>Base of 250-foot descent, bears N. 60° W. and S. 60° E.</p> <p>Draw, 20 lks. wide, course S. 60° E.; begin abrupt ascent, bears N. 60° W. and S. 60° E.</p> <p>Top of 130-foot ascent, bears N. W. and S. 60° E.; thence over rolling partially bare rock surface.</p> |
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AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 3 E.

| Chains. | |
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| 79.00 | Wash, 5 lks. wide, course N. 20° E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 29, 6 ins. in ground to solid rock, upon which I mark cross (+), around which build mound of stone, 5 ft. base, 3 ft. high, for corner of secs. 3, 4, 33 and 34, Tps. 33 and 34 S., R. 3 E., marked T 33 S S 34 in N. E. quadrant, R 3 E S 3 in E. E. quadrant, T 34 S S 4 in S. W. quadrant, S 33 in N. W. quadrant, RESERVE in N.E., N.W. and S.W. quadrants, with 3 notches on E. and W. sides, from which |
| | A cedar, 14 ins. diam., bears N. 49°45' E., 39 lks. dist., marked RES T 33 S R 3 E S 34 B T |
| | A pine, 12 ins. diam., bears S. 39°15' E., 27 lks. dist., marked T 34 S R 3 E S 3 B T |
| | A pine, 22 ins. diam., bears S. 25°30' W., 135 lks. dist., marked RES T 34 S R 3 E S 4 B T |
| | A pinion, 6 ins. diam., bears N. 45°30' W., 68 lks. dist., marked RES T 33 S R 3 E S 33 B T |
| | Land, broken and hilly. |
| | Timber, scattering pinion and pine in draws and crevasses. |
| | Surface, principally bare sand rock. |
| <hr/> | |
| | At this corner I set off 21°49'30" N. on declination arc and at 12 ^h 05 ^m 30 ^s observe sun on the meridian and obtain a reading of 37°54' on the latitude arc, which agrees with other data. |
| | Tps. 33 and 34 S., R. 3 E. |
| | Magnetic declination, 16°30' |
| | From corner of secs. 3, 4, 33 and 34, Tps. 33 and 34 S., R. 3 E., I run |
| | East on true line between secs. 3 and 34, over rolling bare rock surface. |
| .15 | Wash, 5 lks. wide, course N. 20° E. |
| 7.00 | Begin descent, bears N. 60° W. and S. 60° E. |
| 9.00 | Dry branch, 80 lks. wide, course S. 60° E., at base of 50-foot descent. |
| 10.00 | Begin abrupt ascent, bears N. 60° W. and S. 60° E. |
| 40.00 | Falls on steep rock slope too steep for monument. |
| 40.66 | Mark cross (+) with $\frac{1}{4}$ W C on N. side of same, on bare sandstone surface, for witness corner to $\frac{1}{4}$ sec. corner, from which |
| | A pinion, 8 ins. diam., bears N. 77° E., 161 lks. dist., marked RES W C $\frac{1}{4}$ S 34 B T |
| | No other trees available; build mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, 2 ft. north of witness corner point. |
| 50.10 | Build mound of stone, 4 ft. base, 3 ft. high, for line marking on top of 700-foot ascent, bears N. 20° W. and S. 20° E. Leave bare rock surface, enter growth of small timber, bears N. 20° W. and S. 20° E. |
| 50.50 | Begin gradual descent, bears N. 20° W. and S. 20° E. |
| 69.91 | Pinion tree, 16 ins. diam., on line; I mark with 2 notches on E. and W. sides. |
| 76.20 | Base of 50-foot descent at draw, 10 lks. wide, course S. E.; begin ascent, bears N. W. and S. E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 30, 3 ft. |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 3 E.

Chains

in ground, for corner of secs. 2, 3, 34 and 35 marked

T. 33 S S 35 in N. E. quadrant,

R. 3 E, S 2 in S. E. quadrant,

T. 34 S S 3 in S. W. quadrant,

S. 34 in N. W. quadrant,

RESERVE in N. E. and N. W. quadrants, with 2 notches on E. and 4 on W. sides, from which

A pinion, 10 ins. diam., bears N. $56^{\circ}30'$ E.,
24 lks. dist., marked RES T 33 S R 3 E
S 35 B T

A pinion, 14 ins. diam., bears S. 24° E., 50
lks. dist., marked T 34 S R 3 E S 2 B T

A pinion, 14 ins. diam., bears S. 20° W., 38
lks. dist., marked T 34 S R 3 E S 3 B T

A cedar, 12 ins. diam., bears N. $17^{\circ}30'$ W.,
36 lks. dist., marked RES T 33 S R 3 E
S 34 B T

Corner falls on S. W. slope at south end of long
cedar ridge, 80 ft. above draw.

Land, precipitous and mountainous.

Timber, pinion and cedar on last half.

Soil, bare sand rock and rock, 4th rate.

Formation, changes from sandstone to sandy; sub-
surface covered with trachyte boulders, at top of
ridge.

July 13, 1904:

July 14: At corner of secs. 2, 3, 34 and 35,,
at 9^h05^m30^s a.m., l.m.t., I set off $37^{\circ}54'$ on the
latitude arc and $21^{\circ}41'30''$ N. on the declination
arc, and determine meridian with the solar.
Magnetic declination $16^{\circ}40'$ E.

Thence I run

East on true line between secs. 2 and 35, through
small juniper and pinion timber, gradually as-
cending along south slope of ridge.

7.00 Top of ascent on south end of ridge, 30 ft. above
sec. corner; begin descent, bears N. E. and
S. 80° W.

17.50 Draw, 10 lks. wide, course S. 80° E., at base of
80-foot descent, bears N. 80° W. and S. 80° E.;
begin ascent, bears N. 80° W. and S. 80° E.

28.00 Draw, 8 lks. wide, course S. 20° E.

32.00 Top of 50-foot ascent, bears N. and S.; begin
descent, bears N. and S.

40.00 Set a sandstone $18 \times 10 \times 4$ ins., 12 ins. in the ground
for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from
which

A pinion, 10 ins. diam., bears N. 45° E., 17
lks. dist., marked RES $\frac{1}{4}$ S 35 B T

A pinion, 4 ins. diam., bears S. $15^{\circ}15'$ E., 27
lks. dist., marked $\frac{1}{4}$ S 2 B T

43.00 Base of 50-foot descent, bears N. E. and S. W., at
side hill draw, 10 lks. wide, course S.; begin
ascent, bears N. W. and S. E.

46.00 Top of 50 ft. ascent, bears N. W. and S. E.

56.00 Begin descent, bears N. E. and S. 80° W.

69.00 Base of 150-foot descent, bears N. 50° E. and S. W.,
at draw, 15 lks. wide, course N. 50° E.; begin
ascent, bears N. 50° E. and S. W.

71.70 Wash, 5 lks. wide, course N. 20° W.

77.00 Top of 50-foot ascent, bears N. and S.; begin do-
scent, bears N. and S.

80.00 Set U. S. Forest Reserve Boundary Post No. 31, 2
ft. in ground to rock, and build mound of stone,
3 ft. base, $1\frac{1}{2}$ ft. high, around same, for corner

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 3 E.

| | |
|--------|--|
| Chains | <p>of secs. 1, 2, 35 and 36, marked T 33 S S 36 in N. E. quadrant R 3 E S 1 in S. E. quadrant T 34 S S 2 in S. W. quadrant S 35 in N. W. quadrant RESERVE in N. E. and N. W. quadrants, with 1 notch on E. and 5 on W. sides, from which A pinion, 8 ins. diam., bears N. 48°45' E., 43 lks. dist., marked RES T 33 S R 3 E S 36 B T A cedar, 10 ins. diam., bears S. 84°30' E., 30 lks. dist., marked T 34 S R 3 E S 1 B T A pinion, 14 ins. diam., bears S. 7°30' W., 42 lks. dist., marked T 34 S R 3 E S 2 B T A pinion, 10 ins. diam., bears S. 51° 30' W., 55 lks. dist., marked RES T 33 S R 3 E S 35 B T Timber, small cedar and pinion. Land, mountainous and hilly. Soil, rocky, 4th rate. Formation, trachyte boulders on top of hills over lower strata of white sandstone.</p> |
| | <p>At this corner I set off 21°40'30" N. on the de- clination arc and at 12^h05^m30^s l.m.t. observe sun on the meridian and obtain a reading of 37°54' on the latitude arc.</p> <p>Magnetic declination 15°55' E. From corner of secs. 1, 2, 35 and 36, I run East on true line between secs. 1 and 36, through small timber, descending, bears N. and S.</p> |
| 1.80 | Draw, 10 lks. wide, course N. 20° E., at base of 30-foot descent, below sec. corner; begin ascent, bears N. 20° E. and S. 20° W. |
| 3.50 | Top of 50-foot ascent, bears N. 20° E. and S. 20° W. thence over rolling surface. |
| 7.30 | Draw, 5 lks. wide, course N. 20° E. |
| 11.00 | Begin descent, bears N. 20° E. and S. 20° W. |
| 19.00 | Draw, 10 lks. wide, course N. 30° E. |
| 23.00 | Descent, becomes precipitous, bears N. W. and S. 60° E. |
| 25.50 | Base of 200-foot descent, bears N. W. and S. 60° E. |
| 25.70 | Sand Creek, 40.lks. wide, stream of alkaline water, 4 lks. wide, 1 in. deep, course S. 60° E. |
| 26.00 | Begin abrupt ascent, bears N. W. and S. 60° E. |
| 27.50 | Top of canyon wall 80 ft. high, bears N. W. and S: 60° E.; thence over nearly level bench. |
| 33.00 | Draw, 10 lks. wide, course S.; begin ascent, bears N. W. and S. E. |
| 40.00 | Set sandstone 22x12x8 ins. 16 ins. in ground, for $\frac{1}{2}$ sec. corner, marked $\frac{1}{2}$ on N. side, from which A pinion, 12 ins. diam., bears N. 70°30' W., 28 lks. dist., marked RES $\frac{1}{2}$ S 36 B T A cedar, 10 ins. diam., bears S. 35°30' E., 27 lks. dist., marked $\frac{1}{2}$ S 1 B T |
| 45.50 | Wash, 5 lks. wide, course S. |
| 58.50 | Top of 300-foot ascent, bears N. 20° W. and S. |
| 70.00 | Leave timber, enter sage brush flat, bears N.W. and S.E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 32, 2 $\frac{1}{2}$ ft. in ground to rock, with mound of stone and earth, 3 ft. base, 1 ft. high around same for corner of Tps. 33 and 34 S., Rs. 3 and 4 E., marked |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 3 E.

Chains.

T 33 S S 31 in N. E. quadrant
 R 4 E S 6 in S. E. quadrant
 T 34 S S 1 in S. W. quadrant
 R 3 E S 36 in N. W. quadrant
 RESERVE in N. E. and N. W. quadrants, with 6
 notches on N., S., E. and W. sides, from which
 A cedar, 10 ins. diam., bears N. 55°30' E., 192
 lks. dist., marked RES T 33 S R 4 E S 31
 B T
 A cedar, 12 ins. diam., bears S. 27°45' E.,
 418 lks. dist., marked T 34 S R 4 E S 6
 B T
 A cedar, 14 ins. diam., bears S. 21° W., 329
 lks. dist., marked T 34 S R 3 E S 1 B T
 A pinion, 10 ins. diam., bears N. 6°15' W.,
 264 lks. dist., marked RES T 33 S R 3 E
 S 36 B T

Land, mountainous and rolling.

Soil, sandy and rocky, 4th rate.

Timber, small cedar and pinion pine.

Some local attraction throughout mile.

July 14, 1904.

GENERAL DESCRIPTION.

T. 34 S., R. 2 E., is mountainous and broken,
 Death Gulch and its tributaries forming a strip
 of country about 3 miles wide practically barren
 of all growth and consisting of bare sand rock
 surface cut by steep walled canyons, embracing
 secs. 3, 4, 5 and part of 6, and running in a
 southeasterly direction through township. Stream
 of water in Death Gulch in southeast corner of
 township. No water in other portions except in
 holes washed in sand rock (tanks). SandCreek
 Canyon cuts off N. E. corner of township and is
 small stream of strong alkali water. Tops of
 ridges in N. E. and S. W. corners are of trachyte
 boulder formation with sandstone sub-strata, and
 are timbered with small cedar and pinion pine,
 with some scattering yellow pine.

In T. 33 S., R. 3 E., there is some settlement in
 S. E. corner. King's Ranch is located about in
 sec. 25, and other ranches are situated north
 of line in Salt Gulch, in Rs. 3 and 4 E.

Tps. 33 and 34 S., R. 4 E.

July 15:

At corner of Tps. 33 and 34 S., Rs. 3 and 4 E., at
 7h05^m45^s a.m., l.m.t., I set off 37°54' on the
 latitude arc and 21°34' N. on the declination
 arc and establish meridian with the solar.
 Magnetic declination 16°30' E.

Thence I run

East on true line between secs. 6 and 31, over
 level sage flat plateau.

.50 Trail, bears N. 20° W. and S. 20° E., "Escalante
 and Salt Gulch Trail".

5.50 Leave sage flat, enter timber and begin descent,
 bears N. 30° W. and S. 30° E.

9.00 Base of 50-foot descent, bears N. W. and S. E.
 Draw, 10 lks. wide, course S. E.; begin ascent,
 bears N. W. and S. E.

29.50 Top of 100-foot ascent, bears N. 80° W. and
 S. 80° E.

33.50 Begin descent, bears N. 20° E. and S. 70° W.

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

Chains.

- 38.88 Set sandstone 18x14x4 ins., 6 ins. in the ground to solid rock and build mound of stone $2\frac{1}{2}$ ft. base, 1 ft. high, around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which
A pinion, 6 ins. diam., bears N. 24° W., 60 lks. dist., marked RES $\frac{1}{4}$ S 31 B T
A pinion, 10 ins. diam., bears S. 58° W., 18 lks. dist., marked $\frac{1}{4}$ S 6 B T
- 46.65 Begin precipitous descent, bears N. and S.
- 52.80 Base of 200-foot descent, bears N. 20° W. and S. 20° E.
- 53.00 Salt Creek, 50 lks. wide, stream of alkali water, 5 lks. wide, 3 ins. deep, course S. 20° E.; begin ascent, bears N. 20° W. and S. 20° E.
- 54.05 Top of canyon wall on left bank of Salt creek, 50 ft. above creek.
- 68.00 Top of ascent, bears N. 20° W. and S. E., 200 ft. above Salt Creek.
- 74.00 Draw, 10 lks. wide, course S., begin ascent, bears N. and S.
- 78.88 Set U. S. Forest Reserve Boundary Post No. 33, 3 ft. in ground, for corner of secs. 5, 6, 31 and 32, marked
T 33 S S 32 in N. E. quadrant
R 4 E S 5 in S. E. quadrant
T 34 S S 6 in S. W. quadrant
S 31 in N. W. quadrant
RESERVE in N. E. and N. W. quadrants, with 5 notches on E. and 1 on W. sides, from which
A cedar, 10 ins. diam., bears N. $32^{\circ}30'$ E., 85 lks. dist., marked RES T 33 S R 4 E S 32 B T
A cedar, 14 ins. diam., bears S. $46^{\circ}30'$ E., 60 lks. dist., marked T 34 S R 4 E S 5 B T
A cedar, 18 ins. diam., bears S. $60^{\circ}15'$ W., 42 lks. dist., marked T 34 S R 4 E S 6 B T
A pinion, 10 ins. diam., bears N. $29^{\circ}45'$ W., 76 lks. dist., marked RES T 33 S R 4 E S 31 B T
- Land, mountainous.
Soil, sandy and rocky, 4th rate.
Timber, scrubby cedar and pinion pine.
Local attraction of magnetic needle throughout mile. Corner falls on W. slope of hill, 50 ft. above draw.

At this corner I set off $21^{\circ}31'15''$ N. on the declination arc and at $12^{\text{h}}05^{\text{m}}45^{\text{s}}$ l.m.t., observe sun on meridian and obtain a reading of $37^{\circ}54'$ on the latitude arc.

Note: Distance of 78.88 chs. for this mile is derived from computing convergency from Seventh Standard Parallel South as follows:

Lat. 7^{h} S.P.S. = $37^{\circ}43'26''$

Lat. south bdy. T 33 S = $37^{\circ}53'50''$

Cos. $37^{\circ}43'26''$: cos. $37^{\circ}53'50''$ = 480 : length

S. bdy. T 33 S .79096 : 78911 = 480 : 478.88 chs.

From corner of secs. 5, 6, 31 and 32, Tps. 33 and 34 S., R. 4 E., I run

East on true line between secs. 5 and 32, over hilly surface, through timber, ascending, bears N. and S. Magnetic declination $15^{\circ}58'$ E.

1.00 Top of ascent, 15 ft. above sec. corner, bears N. and S.

2.60 Begin descent, bears N. and S.

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

| Chains. | |
|---------|--|
| 9.20 | Abrupt descent over sandstone ledge. |
| 13.00 | base of 200-foot descent, bears N. 20° E. and S. 20° W. |
| 15.20 | Draw, 10 lks. wide, course S. 20° W. |
| 30.50 | Dry branch, 20 lks. wide, rock banks, 20 ft. deep, course S. W. Begin ascent, bears N. E. and S. W. |
| 40.00 | Set trachyte boulder 22 xl4x8 ins., 6 ins. in the ground to solid rock, and build mound of stone 3 ft. base, 1½ ft. high, around same for ¼ sec. corner, marked ¼ on N. face, from which A pinion, 14 ins. diam., bears N. 12°30' E., 66 lks. dist., marked RES ¼ S 32 B T A cedar, 14 ins. diam., bears S. 8°30' W., 29 lks. dist., marked ¼ S 5 B T |
| 58.20 | Trail, bears N. and S., "Escalante and Boulder Trail". |
| 61.00 | Vertical ascent of 20 ft. over sandstone ledge, bears N. 50° E. and S. 50° W. |
| 74.50 | Vertical ascent of 20 ft. over sandstone ledge, bears N. 89° E. and S. 80° W. |
| 75.00 | Vertical descent of 20 ft. off of same ledge, bears N. 89° W. and S. 80° E. |
| 79.80 | Vertical ascent of 20 ft. up same ledge; bears N.E. and S. W. |
| 80.00 | Set Forest Reserve Boundary Post No. 34 1 ft. in ground to solid rock, and build mound of stone, 5 ft. base, 3 ft. high, around same for corner of secs. 4, 5, 32 and 33, marked T 33 S S 33 in N. E. quadrant R 4 E S 4 in S. E. quadrant T 34 S S 5 in S. W. quadrant S 32 in N. W. quadrant RESERVE in N. E. and N. W. quadrants, with 4 notches on east and 2 on west faces, from which A cedar, 10 ins. diam., bears N. 66° E., 71 lks. dist., marked RES T 33 S R 4 E S 33 B T A pinion, 18 ins. diam., bears S. 50°30' E., 37 lks. dist., marked T 34 S R 4 E S 4 B T A pinion, 10 ins. diam., bears S. 35° W., 79 lks. dist., marked T 34 S R 4 E S 5 B T A pinion, 14 ins. diam., bears N. 8° W., 10-lks. dist., marked RES T 33 S R 4 E S 32 B T Corner falls on N. W. slope of hill, 250 ft. above last branch. Land, mountainous and broken. Soil, rocky and sandy, 4th rate. Timber, cedar and pinion. |
| 5.00 | From corner of secs. 4, 5, 32 and 33, I run East on true line between secs. 4 and 33, through timber, ascending bears N. E. and S. W. Magnetic declination 15°57' E. Top of abrupt ascent, 50 ft. above sec. cornēr, bears N. and S., continue gradual ascent. |
| 16.30 | Draw, 8 lks. wide, course S. 60° W. |
| 22.50 | Enter draw, 10 lks. wide, course N. 80° W. from E. |
| 25.00 | Leave draw, course W. from N. 80° E. |
| 28.00 | Same draw, course N. 80° W. |
| 40.00 | Set trachyte boulder 28xl8xl0 ins., 20 ins. in the ground, for ¼ sec. corner, marked ¼ on N. face, from which A cedar, 12 ins. diam., bears N. 28°45' W., 46 lks. dist., marked RES ¼ S 33 B T A pinion, 10 ins. diam., bears S. 27° E., 45 lks. dist., marked ¼ S 4 B T |

July 15, 1904

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

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| Chains. | <p>July 16: At this corner, at 7^h05^m45^s a.m., 1.m.t., I set off 37°54' on the latitude arc and 21°24'15" N. on the declination arc, and determine meridian with solar, and continue east between secs. 4 and 33.</p> |
| 44.00 | Top of ascent, 150 ft. above sec. corner, bears N. W. and S. E., thence over rolling land, gradually descending. |
| 49.00 | Leave timber, enter sage flat plateau, bears N. 20° W. and S. E., called "Home bench". |
| 79.70 | Escalante and Boulder road, bears N. W. and S. E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 35, 2 $\frac{1}{2}$ ft. in ground, and build mound of earth around same, 3 ft. base, 1 ft. high, for corner of secs. 3; 4, 33 and 34, marked T 33 S S 34 in N. E. quadrant R 4 E S 3 in S. E. quadrant T 34 S S 4 in S. W. quadrant S 33 in N. W. quadrant RESERVE in N. E. and N. W. quadrants, with 3 notches on E. and W. sides, from which A pinion, 10 ins. diam., bears N. 53° E., 257 lks. dist., marked RES T 33 S R 4 E S 34 B T A cedar, 12 ins. diam., bears S. 51° W., 362 lks. dist., marked T 34 S R 4 E S 4 B T A pinion, 16 ins. diam., bears N. 0°45' W., 176 lks. dist., marked RES T 33 S R 4 E S 33 B T No southeast tree available. Land, rolling. Soil, for 1st half-mile rocky, 4th rate; for last half-mile sandy, 3rd rate, and with water could be made fertile. Timber, cedar and pinion pine. |
| <hr/> | |
| | From corner of secs. 3, 4, 33 and 34, Tps. 33 and 34 S., R. 4 E., I run |
| | East on true line between secs. 3 and 34 through open sage brush flat bench. |
| 19.00 | Leave sage brush, enter timber, bears N. W. and S. E. |
| 20.00 | Begin abrupt descent, bears N. W. and S. E. |
| 30.20 | Precipitous descent over sandstone ledge, bears N. 30° W. and S. 30° E. |
| 35.50 | Base of 450-foot descent, bears N. 30° W. and S. 30° E.; at dry branch, 20 lks. wide, course S. 30° E.; begin precipitous ascent, bears N. 30° W. and S. 30° E. |
| 40.00 | Point for $\frac{1}{4}$ sec. corner falls on side wall of canyon too steep for mound of stone to stand. |
| 41.40 | Mark cross (+) with $\frac{1}{4}$ W C on N. side of same on bare sandstone surface on flat bench 4 ft. wide, for witness corner to $\frac{1}{4}$ sec. corner and build mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, 2 ft. north of cross, from which A pinion, 10 ins. diam., bears N. 12°15' E., 28 lks. dist., marked RES W C $\frac{1}{4}$ S 34 B T A pinion, 6 ins. diam., bears S. 53° E., 176 lks. dist., marked WC $\frac{1}{4}$ S 3 B T |
| 49.65 | Top of abrupt ascent over bare rock surface 350 ft. above branch, bears N. W. and S. E.; continue gradual ascent. |
| 55.00 | Top of ascent, bears N. W. and S. E., 400 ft. above branch; thence over gently rolling plateau. |
| 66.00 | Begin gradual ascent, bears N. W. and S. E. |
| 70.50 | Top of 40-foot ascent, bears N. 60° W. and S. 60° E. |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

Chains.

78.00 Old Escalante and Boulder trail, bears N. 60° E.
and S. 60° W.

80.00 Set U. S. Forest Reserve Boundary Post No. 36, 2½ ft.
in ground, and build mound of stone and earth 2½
ft. base, 1 ft. high, around same for corner of
secs. 2, 3, 34 and 35, marked
T 33 S S 35 in N. E. quadrant
R 4 E S 2 in S. E. quadrant
T 34 S S 3 in S. W. quadrant
S 34 in N. W. quadrant
RESERVE in N. E. and N. W. quadrants, with 2 notch-
es on East and 4 on West sides, from which
A pinion, 10 ins. diam., bears N. 29°30' E.,
41 lks. dist., marked RES T 33 S R 4 E
S 35 B T
A pinion, 10 ins. diam., bears S. 29°30' E.,
72 lks. dist., marked T 34 S R 4 E S 32
B T
A pinion, 12 ins. diam., bears S. 60° W., 8
lks. dist., marked T 34 S R 4 E S 3 B T
A pinion, 8 ins. diam., bears N. 18° W., 47
lks. dist., marked RES T 33 S R 3 E S 34
B T
Land, mountainous.
Soil, bare rock and sandy, 4th rate.
Timber, pinion pine and cedar.

At this corner I set off 21°21'45" N. on declina-
tion arc and at 12^h05^m45^s observe sun on meridian
and obtain reading of 37°54' on latitude arc.

From corner of secs. 2, 3, 34 and 35, Tps. 33 and
34 S., R 4 E., I run
East on true line between secs. 2 and 35, through
small timber over gently rolling plateau.
Magnetic declination 15°56' E.

1.00 Head of gulch, course S.

12.00 Begin descent, bears N. and S., over bare rock
surface.

20.50 Base of 400-foot descent over bare rock surface,
bears N. and S. 20° E.

21.20 Boulder Creek, 50 lks. wide, 12 ft. banks, course
S. 20° E., clear fresh water in pools, all taken
out above for irrigating purposes.

24.00 Begin abrupt ascent, bears N. and S. 20° E.

28.00 Top of 30 ft. ascent, bears N. and S. 20° E.;
thence across level bench.

34.85 Rip Gut fence bears N. 56° W. and S. 56° E., enter
George Baker's desert claim covered with sage and
juniper trees, cultivated land lying to north and
commencing about 20 chs. N.

40.00 Set trachyte boulder 20x12x8 ins., 15 ins. in
ground for ¼ sec. corner, marked ¼ on N. face,
from which
A cedar, 14 ins. diam., bears N. 42°30' E., 196
lks. dist., marked RES ¼ S 35 B T
A cedar, 18 ins. diam., bears S. 43°30' W., 192
lks. dist., marked ¼ S 2 B T

56.48 Pole and wire fence, bears N. 23° E. and S. 23° W.
Leave Geo. Baker's claim.

56.90 Horse trail, bears N. 23° E. and S. 23° W.

63.00 Begin ascent, bears N. 30° E. and S. 30° W.

70.00 Top of 120-foot ascent on N. slope of bare rock
nose, begin descent, bears N. 80° W. and S. 30° E.

80.00 Set U. S. Forest Reserve Boundary Post No. 37, 3
ft. in ground, and raise mound of earth 3 ft.

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

Chains

base, 1 ft. high, around same for corner of secs. 1, 2, 35 and 36. Corner falls on sandy N. E. slope of hill, 80 ft. below summit; marked

T 33 S S 36 in N. E. quadrant

R 4 E S 1 in S. E. quadrant

T 34 S S 2 in S. W. quadrant

S 35 in N. W. quadrant

RESERVE in N. E. and N. W. quadrants, with 1 notch on east and 5 on west sides, from which

A cedar, 18 ins. diam., bears N. $14^{\circ}30'$ E., 28 lks. dist., marked RES T 33 S R 4 E S 36 B T

A cedar, 6 ins. diam., bears S. $61^{\circ}45'$ E., 116 lks. dist., marked T 34 S R 4 E S 1 B T

A cedar, 10 ins. diam., bears S. $51^{\circ}30'$ W., 145 lks. dist., marked T 34 S R 4 E S 2 B T

A cedar, 12 ins. diam., bears N. $15^{\circ}30'$ W., 39 lks. dist., marked RES T 33 S R 4 E S 35 B T

Land, mountainous and rolling.

Soil, rocky, 4th rate; and sandy loam, 2nd rate.

Timber, small cedar and pinion.

July 16, 1904.

July 18: At corner of secs. 1, 2, 35 and 36, Tps. 33 and 34 S., R. 4 E., at 7^h06^m a.m., l.m.t., I set off $37^{\circ}54'$ on the latitude arc and $21^{\circ}04'$ N. on the declination arc, and determine true meridian with the solar. Magnetic declination $15^{\circ}56'$ E.

Thence I run

East on true line between secs. 1 and 36, through timber, gradually descending, bears N. and S., over sandy bench.

12.50 Base of 30-foot descent, bears N. and S.; draw, 10 lks. wide, course S. 20° E.

21.10 Irrigating ditch, 5 lks. wide, course S.; leave timber, enter Woolsey's lucerne field, bears N. and S.

30.00 Irrigating ditch, 5 lks. wide, course S.

31.50 Woolsey's house, bears N., 3 chs. dist.

40.00 Set sandstone $18 \times 12 \times 5$ ins., 12 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face; dig pits $18 \times 18 \times 12$ ins., E. and W. of stone, 3 ft. dist., and raise mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of corner. From $\frac{1}{4}$ sec. corner J. C. Peter's house bears S. $22^{\circ}05'$ E., about 8 chs. dist.

41.20 Fence, bears N. 23° W. and S. 23° E.; leave Woolsey's claim; enter claim of J. C. Peters.

41.60 Irrigating ditch, 5 lks. wide, course S. 20° E.

58.35 Irrigating ditch, 5 lks. wide, course S.

58.50 Fence, bears N. and S., leave Peters' hay field, enter his pasture covered with scattering timber.

59.20 Irrigating ditch, course S. 20° E.; begin gradual descent, bears N. 20° W. and S. 20° E.

71.50 Irrigating ditch, course S. 20° E.

80.00 Set ^{U. S.} Forest Reserve Boundary Post No. 38, 3 ft. in ground, and raise mound of earth, 4 ft. base, 1 ft. high, around same for corner of Tps. 33 and 34 S., Rs. 4 and 5 E., marked

T 33 S S 31 in N. E. quadrant

R 5 E S 6 in S. E. quadrant

T 34 S S 1 in S. W. quadrant

R 4 E S 36 in N. W. quadrant

RESERVE in N. E. and N. W. quadrants, with 6 notches on N., S., E. and W. sides, from which

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 4 E.

Chains.

- A pinion, 8 ins. diam., bears N. 59°30' E., 293 lks. dist., marked RES T 33 S R 5 E S 31 B T
- A pinion, 10 ins. diam., bears S 5°45' E., 234 lks. dist., marked T 34 S R 5 E S 6 B T
- A pinion, 10 ins. diam., bears S. 7°30' W., 292 lks. dist., marked T 34 S R 4 E S 1 B T
- A cedar, 10 ins. diam., bears N. 45°45' W., 52 lks. dist., marked RES T 33 S R 4 E S 36 B T

Land, rolling and level.

Soil, sandy loam, 2nd rate and is mostly under cultivation, being irrigated.

Timber, cedar and pinion.

GENERAL DESCRIPTION.

T. 33 S., R. 4 E., is rough and mountainous, covered with small timber, principally pinion, pine and cedar, with exception of bottom lands and benches lying along Boulder Creek in east half and on Salt Gulch in S. W. quarter, which is settled and cultivated in small ranches by fifteen or twenty families. Boulder postoffice is situated near corner of secs. 22, 25, 26 and 27. In T. 34 S., R. 4 E., there is settlement in secs. 1, 2, 11 and 12; balance of township mountainous, with exception of Home Bench, a high plateau in secs. 3, 4, 9 and 10. This plateau also extends into T. 33 S., R. 4 E., in secs. 33, 34, 27 and 28, and with water could be made fertile.

Tps. 33 and 34 S., R. 5 E.

From corner of Tps. 33 and 34 S., Rs. 4 and 5 E., I run

East on true line between secs. 6 and 31, through timber, gradually descending, bears N. W. and S. E., in Peters pasture.

2.25 Draw, 30 lks. wide, course S. 20° E., at base of descent, 30 ft. below township corner.

4.80 Draw, 5 lks. wide, course S. W.; begin abrupt ascent, bears N. and S. 20° W., up bare rock ascent forming east fence of Peters' pasture enclosure.

14.04 Top of 200-foot ascent on north slope of bare rock nose, at which point I build mound of stone, 4 ft. base, 3 ft. high, for boundary line marking on prominent summit; thence gradually descending along steep N. slope.

32.00 Base of 140-foot descent, bears N. 20° W. and S. 20° E.; leave bare rock, enter timbered sandy bench.

38.88 Set trachyte boulder 22x14x12 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which

A pinion, 16 ins. diam., bears N. 2° W., 15 lks. dist., marked RES $\frac{1}{4}$ S 31 B T

A pinion, 10 ins. diam., bears S. 62° E., 60 lks. dist., marked $\frac{1}{4}$ S 6 B T

40.00 Draw, 15 lks. wide, course N. 20° E.

42.50 Draw, 20 lks. wide, course S. 60° E.

78.88 Set ^{U.S.} S. Forest Reserve Boundary Post No. 39, 30 ins. in ground, and raise mound of earth, 4 ft. base, 1 ft. high, around same, for corner of secs. 5, 6, 31 and 32, marked

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 33 and 34 S., R. 5 E.

Chains.

T 33 S S 32 in N. E. quadrant
R 5 E S 5 in S. E. quadrant
T 34 S S 6 in S. W. quadrant
S 31 in N. W. quadrant
RESERVE in N. E. and N. W. quadrants, with
5 notches on E. and 1 on W. sides, from which
A cedar, 14 ins. diam., bears N. 10° E., 54
lks. dist., marked RES T 33 S R 5 E S 32
B T
A cedar, 8 ins. diam., bears S. 72°45' E., 262
lks. dist., marked T 34 S R 5 E S 5 B T
A pinion, 8 ins. diam., bears S. 84° W., 70
lks. dist., marked T 34 S R 5 E S 6 B T
A pinion, 10 ins. diam., bears N. 46°15' W.,
85 lks. dist., marked RES T 33 S R 5 E
S 31 B T

Land, mountainous and rolling.

Soil, rocky and sandy, 4th and 3rd rate; latter 3/4
mile could be made fertile with water.

Timber, small cedar and pinion.

At this corner I set off 21°01' N. on the declina-
tion arc and at 12^h06^m l.m.t. observe sun on the
meridian and obtain reading of 37°54' on latitude
arc.

Note: The distance of 76.88 chs. for this mile is
derived from computing the theoretical conver-
gency from the 7th Standard Parallel South.

From corner of secs. 5, 6, 31 and 32, I run
East on true line between secs. 5 and 32, over
gently rolling surface covered with small timber.

2.70

30.00

32.00

Draw, 15 lks. wide, course S.
Begin descent, bears N. 20° W. and S. 20° E.
Draw, 10 lks. wide, course S. 20° E., at base of
30-foot descent; begin ascent over bare rock sur-
face, with scattering timber, bears N. 20° W. and
S. 20° E.

40.00

Falls on sandstone ledge in place at the exact
point for 1/2 sec. corner, I cut cross (+) on sand-
stone ledge and mark 1/2 on N. side of same, and
erect a mound of stone, 5 ft. base, 3 ft. high,
on N. of corner, from which

A cedar, 12 ins. diam., bears N. 26° E., 85
lks. dist., marked RES 1/2 S 32 B T

A pinion, 6 ins. diam., bears S. 83°30' E., 119
lks. dist., marked 1/2 S 5 B T

75.00

78.00

80.00

Top of 350 ft. ascent, bears N. W. and S. E.

Begin abrupt descent, bears N. W. and S. E.

Point for corner falls on bare sandstone surface.

At the exact point for corner of secs. 4, 5, 32
and 33 I cut cross (+), with 4 notches on east
and 2 on west sides, over which I set U. S. Forest
Reserve Boundary Post No. 40, with mound of stone,
5 ft. base, 3 1/2 ft. high, around same, for corner
of secs. 4, 5, 32 and 33, marked

T 33 S S 33 in N. E. quadrant

R 5 E S 4 in S. E. quadrant

T 34 S S 5 in S. W. quadrant

S 32 in N. W. quadrant

RESERVE in N. W. quadrant, with 4 notches on east
and 2 on west sides, from which

A pinion, 10 ins. diam., bears S. 58°30' W.,
150 lks. dist., marked T 34 S R 5 E S 5 B T

A pinion, 8 ins. diam., bears N. 61° W., 200
lks. dist., marked RES T 33 S R 5 E S 32
B T

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

Chains.

No other trees available.
Land, level and mountainous.
Soil, sandy and bare rock, 3rd and 4th rates.
Timber, cedar and pinion.

July 18, 1904

July 19: At corner of secs. 4, 5, 32 and 33, Tps. 33 and 34 S., R 5 E., at 8^h06^m a.m., l.m.t., I set off 37°54' on latitude arc and 20°53' N. on the declination arc, and establish meridian with the solar. Magnetic declination 15°50' E.

Thence I run

N. 0°02' W. on true line between secs. 32 and 33, over bare sand rock surface, descending abruptly, bears N. 30° W. and S. 30° E.

20.00

Base of 620-foot descent, bears N. W. and S. E.; thence up bottom of Deer Creek Canyon, over rolling timbered bottom land.

51.00

Enter bed of Deer Creek, 60 lks. wide, 10 ft. banks, course S. 30° E. from N.

39.50

Stream in bed of creek, 8 lks. wide, 3 ins. deep, fresh water (most of water of this creek is taken out above and carried over by ditch to the Boulder Creek Valley for irrigating purposes).

40.00

Falls on east bank of Deer Creek, course S., from N. 20° W.

40.50

Set sandstone 26x14x10 ins., 18 ins. in ground, for witness corner to $\frac{1}{4}$ sec. corner, marked W $\frac{1}{4}$ C on W. face, from which

A cottonwood, 12 ins. diam., bears S. 88° E., 89 lks. dist., marked W C $\frac{1}{4}$ S 33 B T

A cottonwood, 18 ins. diam., bears S. 28°30' W., 205 lks. dist., marked RES W C $\frac{1}{4}$ S 32 B T

53.70

Wash, 5 lks. wide, course S. W., 5 chs. to creek.

60.30

Branch, 40 lks. wide, 15-foot banks, stream fresh water, 3 lks. wide, 1 in. deep, course S. 20° W.

80.00

Set ^{63"}U. S. Forest Reserve Boundary Post No. 41, 30 ins. in ground and build mound of stone and earth, 3 ft. base, 1 ft. high, around same for corner of secs. 28, 29, 32 and 33, marked

T 33 S S 28 in N. E. quadrant

R 5 E S 33 in S. E. quadrant

S 32 in S. W. quadrant

S 29 in N. W. quadrant

RESERVE in N. W. and S. W. quadrants, with 4 notches on E. and 1 on south sides, from which

A pinion, 12 ins. diam., bears N. 59°15' E., 60 lks. dist., marked T 33 S R 5 E S 28 B T

A cedar, 22 ins. diam., bears S. 11°45' E., 80 lks. dist., marked T 33 S R 5 E S 33 B T

A cedar, 10 ins. diam., bears S. 9°45' W., 55 lks. dist., marked RES T 33 S R 5 E S 32 B T

No other tree available.

Land, precipitous and level.

Soil, bare rock and sandy, 4th and 3rd rates.

Timber, pinion, cedar, pine and cottonwood.

At this corner I set off 20°50'30" N. on the declination arc and at 12^h06^m l.m.t. observe sun on the meridian and obtain reading of 37°55' on latitude arc.

From corner of secs. 28, 29, 32 and 33, I run N. 0°02' W. on true line between secs. 28 and 29, through creek bottom.

1.00

Begin abrupt ascent over bare rock surface, bears

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

| | |
|--------|--|
| Chains | N. 60° E. and S. 10° W. |
| 26.00 | Top of 700-foot ascent on east slope 1.50 chs. east of south end of ridge. |
| 31.00 | Ravine, 400 ft. deep, heads 2.00 chs. west of line, course S. 60° E. |
| 37.50 | Top of ascent 740 ft. above sec. corner, bears N. 20° E. and S. 20° W.; thence over timbered plateau. |
| 40.00 | Set trachyte boulder 20x12x10 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |
| | A pinion, 10 ins. diam., bears N. 70°30' W., 81 lks. dist., marked RES $\frac{1}{4}$ S 29 B T |
| | A pinion, 10 ins. diam., bears S. 59°15' E., 80 lks. dist., marked $\frac{1}{4}$ S 28 B T |
| 42.92 | Cedar, 12 ins. diam., on line, I mark with 2 notches on N. and S. faces. |
| 48.00 | Begin descent, bears N. 20° W. and S. 20° E. |
| 60.00 | Base of 500-foot descent in straight wall ravine, course S. E.; begin precipitous ascent, bears N. W. and S. E. |
| 75.00 | Top of 520 ft. ascent, bears N. 80° W. and S. 80° E. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 42, 24 ins. in ground, and build mound of earth, 6 ft. base, $1\frac{1}{2}$ ft. high, around same for corner of secs. 20, 21, 28 and 29, marked |
| | T 33 S S 21 in N. E. quadrant |
| | R 5 E S 28 in S. E. quadrant |
| | S 29 in S. W. quadrant |
| | S. 20 in N. W. quadrant |
| | RESERVE in N. W. and S. W. quadrants, with 4 notches on E. and 2 notches on S. sides, from which |
| | A cedar, 10 ins. diam., bears N. 84° E., 136 lks. dist., marked T 33 S R 5 E S 21 B T |
| | A pinion, 24 ins. diam., bears S. 86°45' E., 123 lks. dist., marked T 33 S R 5 E S 28 B T |
| | A pinion, 12 ins. diam., bears S. 58°45' W., 74 lks. dist., marked RES T 33 S R 5 E S 29 B T |
| | A pinion, 10 ins. diam., bears N. 57° W., 67 lks. dist., marked RES T 33 S R 5 E S 20 B T |
| | Land, mountainous, precipitous and level. |
| | Soil, bare rock and sandy rocky, 4th rate. |
| | Timber, cedar and pinion. |

July 19, 1904

| | |
|-------|--|
| | July 20: At corner of secs. 20, 21, 28 and 29 at 7 ^h 06 ^m a.m., l.m.t., I set off 37°56' on the latitude arc and 20°42'30" N. on the declination arc and establish a meridian with the solar. Magnetic declination 15°50' E. |
| | Thence I run |
| | N. 0°02' W. on true line between secs. 20 and 21, through timber, over level plateau. |
| 29.00 | Begin descent, bears N. 10° W. and S. 10° E. |
| 35.00 | Base of 50-foot descent, bears N. and S. 10° E.; begin ascent, bears N. 10° E. and S., in swale; 1.50 chs. east of this point is elbow of ravine course S. 20° E. from N. |
| 38.50 | Top of 60-foot ascent, bears N. 10° E. and S. 10° W. |
| 40.00 | Set trachyte boulder 20x10x10 ins., 6 ins. in ground to solid rock and build mound of stone, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

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| Chains. | <p>A pinion, 14 ins. diam., bears N. 42°45' W., 42 lks. dist., marked RES $\frac{1}{4}$ S 20 B T</p> <p>A pinion, 10 ins. diam., bears S. 14°45' E., 65 lks. dist., marked $\frac{1}{4}$ S 21 B T</p> |
| 40.50 | Begin descent, bears N. 10° W. and S. 10° E. |
| 43.00 | Base of 50-foot descent, bears N. and S. 10° E.; begin ascent, bears N. 10° E. and S. |
| 46.00 | Top of 60-foot ascent, bears N. 10° E. and S. 10° W. |
| 65.00 | Leave timber, enter open sage brush plateau, bears N. 80° E. and S. W. |
| 80.00 | <p>Set U. S. Forest Reserve Boundary Post No. 43, 24 ins. in ground, and raise mound of stone and earth, 3 ft. base, $1\frac{1}{2}$ ft. high, around same, for corner of secs. 16, 17, 20 and 21, marked</p> <p>T 33 S S 16 in N. E. quadrant</p> <p>R 5 E S 21 in S. E. quadrant</p> <p>S 20 in S. W. quadrant</p> <p>S 17 in N. W. quadrant</p> <p>RESERVE in N.E., N.W. and S.W. quadrants, with 4 notches on E. and 3 on S. sides, from which</p> <p>A cedar, 8 ins. diam., bears S. 71°30' E., 107 lks. dist., marked T 33 S R 5 E S 21 B T</p> <p>No other trees available.</p> <p>Land, level and broken.</p> <p>Soil, sandy and rocky, 4th rate.</p> <p>Timber, cedar and pinion.</p> |
| <hr/> | |
| | <p>From corner of secs. 16, 17, 20 and 21, I run East on true line between secs. 16 and 21, over level sage brush flat plateau.</p> |
| 39.00 | Enter timber, bears N. and S. W. |
| 40.00 | <p>Set trachyte boulder 30x10x8 ins., 20 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which</p> <p>A juniper, 10 ins. diam., bears N. 40° W., 63 lks. dist., marked RES $\frac{1}{4}$ S 16 B T</p> <p>A juniper, 8 ins. diam., bears S. 81°15' W., 140 lks. dist., marked $\frac{1}{4}$ S 21 B T</p> |
| 44.00 | Begin descent, bears N. and S. |
| 66.00 | Base of 600-foot descent at dry branch, 15 lks. wide, course S.; begin ascent, bears N. and S. |
| 73.00 | Top of 150-foot ascent, bears N. and S. E. |
| 74.00 | Begin descent, bears N. 70° E. and S. 70° W. |
| 80.00 | <p>Set U. S. Forest Reserve Boundary Post No. 44, 1 ft. in ground to solid rock, and build mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high; around same for corner of secs. 15, 16, 21 and 22, marked</p> <p>T 33 S S 15 in N. E. quadrant</p> <p>R 5 E S 22 in S. E. quadrant</p> <p>S 21 in S. W. quadrant</p> <p>S 16 in N. W. quadrant</p> <p>RESERVE in N. E. and N. W. quadrants, with 3 notches on E. and S. faces, from which</p> <p>A pinion, 10 ins. diam., bears N. 5°45' E., 35 lks. dist., marked RES T 33 S R 5 E S 15 B T</p> <p>A pinion, 6 ins. diam., bears S. 31° E., 101 lks. dist., marked T 33 S R 5 E S 22 B T</p> <p>A pinion, 8 ins. diam., bears S. 39°15' W., 61 lks. dist., marked T 33 S R 5 E S 21 B T</p> <p>A pinion, 10 ins. diam., bears N. 33°15' W., 69 lks. dist., marked RES T 33 S R 5 E S 16 B T</p> <p>Land, level and mountainous.</p> <p>Soil, sandy and rocky, 4th rate.</p> <p>Timber, pinion and cedar.</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

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| Chains. | At the $\frac{1}{2}$ sec. corner between secs. 16 and 21, I set off $20^{\circ}39'30''$ N. on declination arc and at 12 ^h 06 ^m observe sun on the meridian and obtain a reading of $37^{\circ}56'30''$ on the latitude arc. |
| | From corner of secs. 15, 16, 21 and 22, I run East on true line between secs. 15 and 22 through timber along south slope of hill. |
| 2.50 | Begin descent, bears N. 20° E. and S. W. |
| 8.00 | Base of 100-foot descent at dry branch, 25 lks. wide, course S. 20° W.; begin abrupt ascent, bears N. and S. 20° W. |
| 16.00 | Top of 100-foot ascent, bears N. W. and S. 80° E. |
| 18.00 | Begin descent, bears N. E. and S. 80° W. |
| 21.80 | Base of 50-foot descent at draw, course S. 20° W.; begin ascent, bears N. 20° E. and S. 20° W. |
| 40.00 | Set trachyte boulder 20x14x6 ins., 15 ins. in ground, for $\frac{1}{2}$ sec. corner, marked $\frac{1}{2}$ on N. face, from which |
| | A pinion, 16 ins. diam., bears N. 5° W., 74 lks. dist., marked RES $\frac{1}{2}$ S 15 B T |
| | A double pinion, 18 ins. diam., bears S. 42° W., 98 lks. dist., marked $\frac{1}{2}$ S 22 B T |
| 41.00 | Top of 350-foot ascent, bears N. and S., begin abrupt descent, bears N. and S. |
| 54.00 | Base of 500-foot precipitous descent, bears N. and S. Dry branch, 20 lks. wide, course S. 80° E. for 3 chs., then S. from N. 80° E. for 4 chs., then from N. |
| 54.50 | Begin precipitous ascent, bears N. and S. |
| 80.00 | Falls on steep bare rock, too steep to set corner. |
| 80.10 | Set U. S. Forest Reserve Boundary Post No. 45 on solid rock, and build mound of stone, 6 ft. base, $3\frac{1}{2}$ ft. high, around same for witness corner to corner of secs. 14, 15, 22 and 23, marked |
| | W C on top of cap over No. 45. |
| | T 33 S S 14 in N. E. quadrant |
| | R 5 E S 23 in S. E. quadrant |
| | S 22 in S. W. quadrant |
| | S 15 in N. W. quadrant |
| | RESERVE in N. E. and N. W. quadrants on top, with 2 notches on E. and 3 on S. sides, from which |
| | A pinion, 10 ins. diam., bears S. $24^{\circ}45'$ E., 189 lks. dist., marked W C T 33 S R 5 E S 23 B T |
| | A pinion, 10 ins. diam., bears S. $14^{\circ}45'$ W., 147 lks. dist., marked W C T 33 S R 5 E S 22 B T |
| | A pinion, 10 ins. diam., bears N. $57^{\circ}30'$ W., 291 lks. dist., marked RES W C T 33 S R 5 E S 15 B T |
| | No northeast tree available. |
| | Corner falls on summit of bare rock ridge 550 ft. above branch. |
| | Land, mountainous and precipitous. |
| | Soil, rocky and bare rock, 4th rate. |
| | Timber, pinion and cedar. |

July 20, 1904

July 21: At true point for corner of secs. 14, 15, 22 and 23, which is 10 lks. west of witness corner, at 7^h06^m a.m., l.m.t., I set off $37^{\circ}56'30''$ on latitude arc and $20^{\circ}31'$ N. on the declination arc and establish a meridian by solar observation. Magnetic declination $15^{\circ}30'$ E.

Thence I run

ACUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

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| Chains. | East on true line between secs. 14 and 23, over nearly bare rock surface, with scattering timber. |
| 1.00 | Begin ascent, bears N. and S. |
| 20.60 | Abrupt descent of 90 ft. into head of ravine, course N. 80° E. |
| 33.60 | Point of rock projecting, bears S. |
| 40.00 | Falls on bare rock surface too steep to set corner. |
| 40.20 | Set sandstone 26x18x14 ins., 18 ins. in the ground, for witness corner to $\frac{1}{4}$ sec. corner, marked W C $\frac{1}{4}$ C on N. face, from which |
| | A pinion, 14 ins. diam., bears N. 80° E., 25 lks. dist., marked RES W C $\frac{1}{4}$ S 14 B T |
| | A cedar, 8 ins. diam., bears S. 65° E., 41 lks. dist., marked W C $\frac{1}{4}$ S 23 B T |
| | Corner falls at foot of rock ridge, bearing N. 70° W. and S. 70° E. |
| 42.90 | Base of 500-foot descent, at draw, 15 lks. wide, course S. 20° E.; begin gradual ascent, bears N. 60° W. and S. 20° E. |
| 49.00 | Top of 40-foot ascent, bears N. W. and S. E.; begin descent, bears N. W. and S. E. |
| 50.50 | Base of 30-foot descent at draw, 15 lks. wide, course S. 20° E. |
| 53.00 | Draw, 20 lks. wide, course S. 20° W., begin abrupt ascent, bears N. 20° E. and S. 20° W. |
| 61.00 | Top of 250-foot abrupt ascent, bears N. 20° E. and S. 20° W., continue gradual ascent. |
| 75.00 | Top of ascent, bears N. E. and S. 20° W., 300 ft. above draw. |
| 77.00 | Begin descent, bears N. E. and S. 20° W. |
| 79.50 | Descent of 30 ft. over vertical ^{sandstone} ledge, bears N. E. and S. W. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 46, 18 ins. in ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 13, 14, 23 and 24, marked |
| | T 33 S S 13 in N. E. quadrant |
| | R 5 E S 24 in S. E. quadrant |
| | S 23 in S. W. quadrant |
| | S 14 in N. W. quadrant |
| | RESERVE in N. E. and N. W. quadrants, with 1 notch on E. and 3 on S. sides, from which |
| | A pinion, 14 ins. diam., bears N. 5°15' E., 41 lks. dist., marked RES T 33 S R 5 E S 13 B T |
| | A pinion, 14 ins. diam., bears S. 22°30' E., 59 lks. dist., marked T 33 S R 5 E S 24 B T |
| | A pinion, 12 ins. diam., bears S. 59°15' W., 45 lks. dist., marked T 33 S R 5 E S 23 B T |
| | A cedar, 6 ins. diam., bears N. 28°45' W., 47 lks. dist., marked RES T 33 S R 5 E S 14 B T |
| | Corner falls on S. E. slope, 50 ft. below summit. |
| | Land, mountainous and precipitous. |
| | Soil, sandy and bare rock, 4th rate. |
| | Timber, pinion and cedar. |
| <hr/> | |
| At this corner I set off 20°28' N. on the declination arc and at 12 ^h 06 ^m 10 ^s observe sun on the meridian and obtain a reading of 37°56'30" on latitude arc. | |
| From corner of secs. 13, 14, 23 and 24, I run East on true line between secs. 13 and 24, through scattering timber over broken rocky surface, descending, bears N. E. and S. W. | |
| 5.00 | Draw, 3 lks. wide, course S. E. |
| 6.50 | Draw, 4 lks. wide, course S. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 5 E.

| | |
|---------|--|
| Chains. | |
| 25.00 | Begin abrupt descent, bears N. 20° E. and S. 20° W. |
| 33.00 | Base of 500-foot descent at, steep creek, 20 lks. wide, course S. 20° W., dry stream; begin ascent, bears N. 20° E. and S. 20° W. |
| 40.00 | Set sandstone 22x18x4 ins., 10 ins. in the ground to rock and build mound of stone, 3 ft. base, 1 ft. high, around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which A pinion, 12 ins. diam., bears N. 59°30' E., 9 lks. dist., marked RES $\frac{1}{4}$ S 13 B T A pinion, 10 ins. diam., bears S. 5°15' W., 27 lks. dist., marked $\frac{1}{4}$ S 24 B T |
| | July 21, 1904. |
| | July 22: At this corner at 9 ^h 06 ^m a.m., l.m.t., I set off 37°56'30" on latitude arc and 20°17'50 N. on the declination arc, and continue east. |
| 64.00 | Top of 500 ft. ascent, bears N. and S. |
| 64.50 | Begin gradual descent, bears N. and S. |
| 71.00 | Draw, 5 lks. wide, course N. 80° E. |
| 80.00 | Set "U" S. Forest Reserve Boundary Post No. 47 2 ft. in ground to solid rock and build mound of stone and earth 3 ft. base, 1 $\frac{1}{2}$ ft. high, around same for corner of secs. 13, 18, 19 and 24, marked T 33 S S 18 in N. E. quadrant R 6 E S 19 in S. E. quadrant S 24 in S. W. quadrant R 5 E S 13 in N. W. quadrant RESERVE in N. W. quadrant, with 3 notches on N. and S. sides, from which A pinion, 12 ins. diam., bears N. 57°15' E., 64 lks. dist., marked T 33 S R 6 E S 18 B T A pinion, 10 ins. diam., bears S. 79°15' E., 124 lks. dist., marked T 33 S R 6 E S 19 B T A pinion, 12 ins. diam., bears S. 44°30' W., 31 lks. dist., marked T 33 S R 5 E S 24 B T A pinion, 10 ins. diam., bears N. 5° W., 3 lks. dist., marked RES T 33 S R 5 E S 13 B T |
| | Corner falls on gradual east slope 50 ft. below summit. |
| | Land, mountainous and precipitous. |
| | Soil, sandy and bare rock, 4th rate. |
| | Timber, pinion and juniper. |

T. 33 S., Rs. 5 and 6 E.

| | |
|-------|--|
| | From corner of secs. 13, 18, 19 and 24, T. 33 S., Rs. 5 and 6 E., I run |
| | North on true line between secs. 13 and 18, over rolling and broken surface through timber. |
| 5.00 | Draw, 5 lks. wide, course N. 80° E. |
| 25.80 | Draw, 10 lks. wide, course S. 30° E. |
| 40.00 | Set sandstone 26x14x4 ins., 10 ins. in the ground to rock and build mound of stone, 3 ft. base, 1 ft. high, around same for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 12 ins. diam., bears S. 75° E., 3 lks. dist., marked $\frac{1}{4}$ S 18 B T A pinion, 10 ins. diam., bears S. 22°30' W., 86 lks. dist., marked RES $\frac{1}{4}$ S 13 B T |
| 41.75 | Draw, 6 lks. wide, course S. 70° W. |
| 49.50 | Draw, 10 lks. wide, course S. 70° W. |
| 58.40 | Draw, 20 lks. wide, course S. 20° W. |
| 60.00 | Same draw, course S. 20° E. |
| 61.20 | Same draw, course S. 20° W. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., Rs. 5 and 6 E.

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| Chains 80.00 | <p>Set ^{iron} U. S. Forest Reserve Boundary Post No. 48, 18 ins. in ground to solid rock and build mound of earth, 6 ft. base, 2 ft. high, around same for corner of secs. 7, 12, 13 and 18, marked T 33 S S 7 in N. E. quadrant R 6 E S 18 in S. E. quadrant R 5 E S 13 in S. W. quadrant S 12 in N. W. quadrant RESERVE in N. W. and S. W. quadrants, with 2 notches on N. and 4 notches on S. sides, from which A pinion, 10 ins. diam., bears N. 69°30' E., 56 lks. dist., marked T 33 S R 6 E S 7 B T A cedar, 12 ins. diam., bears S. 35 E., 53 lks. dist., marked T 33 S R 6 E S 18 B T A cedar, 24 ins. diam., bears S. 23° W., 68 lks. dist., marked RES T 33 S R 5 E S 13 B T A cedar, 16 ins. diam., bears N. 55°30' W., 25 lks. dist., marked RES T 33 S R 5 E S 12 B T Land, rolling and broken. Soil, sandy and rocky, 4th rate. Timber, pinion and cedar.</p> <p style="text-align: right;">July 22, 1904.</p> <hr/> <p>At the $\frac{1}{4}$ sec. corner between secs. 13 and 18, I set off 20°16' N. on the declination arc, and at 12h06m13s observe sun on meridian and obtain a reading of 37°57' on latitude arc.</p> <p>Note: Impossible to begin work earlier on account of long walks from camp in Deer Creek due to scarcity of water.</p> <p>July 23: At the corner of secs. 7, 12, 13 and 18 at 9 a.m., l.m.t., I set off 37°57'15" on latitude arc and 20°05'30" N. on the declination arc and establish meridian with the solar. Magnetic declination 15°54' E.</p> <p>Thence I run North between secs. 7 and 12 over rolling land, through small juniper and pinion timber. 15.00 Draw, 5 lks. wide, course S. 70° W. 28.00 Begin descent, bears N. 80° E. and S. W. 37.50 Base of 80-foot descent at ravine, course W. into canyon, 2 chs. W. of line, the course of which is S. 20° W. Thence along W. slope. 40.00 Set trachyte boulder 20x14x8 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 10 ins. diam., bears N. 15°15' W., 42 lks. dist., marked RES $\frac{1}{4}$ S 12 B T A pinion, 8 ins. diam., bears S. 17°15' E., 36 lks. dist., marked $\frac{1}{4}$ S 7 B T 43.20 Begin precipitous descent, bears N. E. and S. 30° W. 50.00 Draw, 20 lks. wide, in canyon 150 ft. deep, course S. 30° W., east prong of steep creek. 55.60 Top of 150-foot ascent, bears N. 30° E. and S. 30° W. 59.00 Begin descent, abrupt, bears N. 20° W. and S. 20° E. 64.00 Along steep west wall of canyon. 78.00 Base of 150-foot descent at draw, 20 lks. wide, in same canyon, course S. 20° E. 78.20 Begin abrupt ascent, bears N. 20° W. and S. 20° E. 79.50 Draw, 10 lks. wide, course W. for 1 ch. into canyon. 80.00 Set ^{iron} U. S. Forest Reserve Boundary Post No. 49, 1 ft. in ground to solid rock, and build mound of stone, 5 ft. base, 3 ft. high, around same for</p> |
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AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., Rs. 5 and 6 E.

Chains.

corner of secs. 1, 6, 7 and 12, marked
T 33 S S 6 in N. E. quadrant
R 6 E S 7 in S. E. quadrant
R 5 E S 12 in S. W. quadrant
S 1 in N. W. quadrant
RESERVE in N. W. and S. W. quadrants, with 1
notch on N. and 5 notches on S. sides, from
which

- A pinion, 10 ins. diam., bears N. 42°45' E.,
52 lks. dist., marked T 33 S R 6 E S 6 B T
- A pinion, 8 ins. diam., bears S. 63°45' E.,
119 lks. dist., marked T 33 S R 6 E S 7 B T
- A pinion, 14 ins. diam., bears S. 32°30' W.,
80 lks. dist., marked RES T 33 S R 5 E
S 12 B T
- A pinion, 10 ins. diam., bears N. 67°45' W.,
72 lks. dist., marked RES T 33 S R 5 E
S 1 B T

Land, mountainous and broken.

Soil, sandy and rocky, 4th rate.

Timber, pinion, pine and cedar.

Note: No work in p. m. on account of cloudy weather
July 23, 1904.

July 25: At corner of secs. 1, 6, 7 and 12, at
7h06m15s a.m., l.m.t., I set off 37°58'15" on lat-
itude arc and 19°42' N. on the declination arc,
and establish a meridian with solar. Magnetic
declination 15°38' E.

Thence I run

✓ North on true line between secs. 1 and 6, through
small timber, ascending, abrupt, bears N. W. and
S. E.

- 10.00 Top of 150-foot ascent on W. end of spur.
- 10.40 Begin descent, bears E. and S. W.
- 12.00 Base of 50-foot descent at draw, 10 lks. wide,
course W. for 3 chs. to canyon draw, begin abrupt
ascent, bears E. and N.W.
- 23.00 Top of 150-foot ascent, bears N. 10° W. and S. 10° E.
Begin descent, bears N. 10° E. and S. 10° W.
- 34.75 Draw, 10 lks. wide, course S. W. at base of 70-foot
descent, bears N. E. and S. W.; begin ascent,
bears N. E. and S. W.
- 36.00 Wash, 5 lks. wide, course S. W.
- 40.00 Set sandstone 24x12x4 ins., 18 ins. in ground for
1/4 sec. corner marked 1/4 on W. face, from which
A pinion, 12 ins. diam., bears S. 80°30' E.,
37 lks. dist., marked 1/4 S 6 B T
A pinion, 14 ins. diam., bears S. 57°45' W.,
67 lks. dist., marked RES 1/4 S 1 B T
- 43.50 Top of 80-foot ascent, bears N. 80° E. and S. 80° W.
- 44.60 Begin abrupt descent, bears N. E. and S. W.
- 53.00 Base of 80-foot descent at draw, 15 lks. wide, ✓
course S. 30° W.; begin ascent, bears N. 30° E.
and S. 30° W. ✓
- 62.00 Top of 60-foot ascent on east end of spur.
- 64.00 Draw, 5 lks. wide, course S. E.
- 72.50 Elbow of draw, 10 lks. wide, course S. 20° E. from
N. 20° E.
- 76.20 Same draw, course S. 20° E.
- 77.65 Same draw, course S. 20° W.
- 79.40 Begin abrupt ascent up rock ledge, bears N. E. and
S. W.
- 79.80 Top of 30-foot ledge.
- 80.00 I mark cross on solid rock in place at corner and
set 10" S. Forest Reserve Boundary Post No. 50
over cross and build mound of stone 6 ft. base,
3 1/2 ft. high, around same for corner of Tps. 32

ACUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., Rs. 5 and 6 E.

Chains

and 33 S., Rs. 5 and 6 E., marked
T 32 S S 31 in N. E. quadrant
R 6 E S 6 in S. E. quadrant
T 33 S S 1 in S. W. quadrant
R 5 E S 36 in N. W. quadrant
RESERVE in N. E., N. W. and S. W. quadrants,
with 6 notches in N., S., E. and W. sides,
from which

A pinion, 10 ins. diam., bears N. $39^{\circ}30'$ E.,
119 lks. dist., marked RES T 32 S R 6 E
S 31 B T

A pinion, 6 ins. diam., bears S. $75^{\circ}30'$ E.,
17 lks. dist., marked T 33 S R 6 E S 6 B T

A pinion, 12 ins. diam., bears S. $52^{\circ}45'$ W.,
86 lks. dist., marked RES T 33 S R 5 E
S 1 B T

A pinion, 12 ins. diam., bears N. $89^{\circ}30'$ W.,
54 lks. dist., marked RES T 32 S R 5 E
S 36 B T

Land, mountainous and broken.

Soil, rocky and sandy, 4th rate.

Timber, small pinion, pine and cedar.

At this township corner I set off $19^{\circ}38'30''$ N. on
the declination arc and at $12^{\text{h}}06^{\text{m}}17^{\text{s}}$ l.m.t., ob-
serve sun on the meridian and obtain a reading of
 $37^{\circ}59'$ on the latitude arc.

Note: Line is checked throughout by backsights
and foresights on prominent points, and p.m. and
a.m. observations at end and beginning of next
days work compared.

GENERAL DESCRIPTION.

Township 33 S., R. 5 E., is rough, mountainous
country, cut up by deep canyons draining to the
south. Deer Creek and tributaries drain the wes-
tern and central portion, and it is a stream of
clear fresh water, though nearly all of the water
is taken out and carried by ditch into T. 33 S.,
R. 4 E., into Boulder Creek Valley. Steep Creek
drains the eastern portion and is a dry stream in
deep sand rock canyon.

Timber is all small and inferior, principally pin-
ion, pine and cedar. A level plateau covered
with sage brush and scattering junipers lies in
secs. 16, 17, 20 and 21, and with water could be
made fertile.

Tps. 32 and 33 S., R. 6 E.

At corner of Tps. 32 and 33 S., Rs. 5 and 6 E.,
at $1^{\text{h}}06^{\text{m}}15^{\text{s}}$ l.m.t., I set off $37^{\circ}59'$ on the lati-
tude arc and $19^{\circ}38'$ N. on the declination arc
and establish meridian by solar observation.
Magnetic declination $15^{\circ}48'$ E.

Thence I run

East on true line between secs. 6 and 31, over
broken rocky surface, through small timber.

.20 Begin descent over 30-foot sandstone ledge, bears
N. 20° E. and S. 20° W.

.60 Draw, 15 lks. wide, course S. 20° W., at base of
50-foot descent.; begin ascent, bears N. 20° E.
and S. 20° W.

5.50 Top of 70-foot ascent, bears N. 20° E. and S. 20° W.

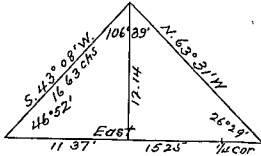
AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 32 and 33 S., R. 6 E.

| Chains. | |
|---------|---|
| 13.50 | Begin abrupt descent, bears N. 20° E. and S. 20° W. |
| 18.00 | Base of 90-foot descent at draw, 20 lks. wide, course S. W.; begin ascent, bears N. 70° E. and S. 7°. |
| 24.00 | Top of 80-foot ascent, bears N. 80° E. and S. W.; thence along bench of ledge. |
| 28.60 | Begin descent over ledge, bears N. 80° W. and S. 80° E. |
| 33.00 | Base of 40-foot descent at draw, 10 lks. wide, course N. 80° W. |
| 36.50 | Draw, 5 lks. wide, course N. W.; begin abrupt ascent, bears N. 20° W. and S. 20° E. |
| 38.27 | Set a sandstone 22x14x4 ins., 18 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which <ul style="list-style-type: none"> A pinion, 12 ins. diam., bears N. 18°45' W., 43 lks. dist., marked RES $\frac{1}{4}$ S 31 B T A pinion, 10 ins. diam., bears S. 11°30' W., 88 lks. dist., marked $\frac{1}{4}$ S 6 B T |
| 40.50 | 50 ft. vertical ledge, bears N. and S. |
| 46.00 | Top of 250-foot ascent, bears N. 20° W. and S. 20° W. |
| 60.00 | Begin descent, bears N. and S. |
| 74.80 | Base of 300-foot descent, at draw, 15 lks. wide, course S.; begin abrupt ascent. |
| 78.00 | Draw, 5 lks. wide, course S. 70° W. |
| 78.27 | Set U. S. Forest Reserve Boundary Post No. 51, 10 ins. in ground to solid rock and build mound of stone, 6 ft. base, 3 ft. high, around same for corner of secs. 5, 6, 31 and 32, marked <ul style="list-style-type: none"> T 32 S S 32 in N. E. quadrant R 6 E S 5 in S. E. quadrant T 33 S S 6 in S. W. quadrant S 31 in N. W. quadrant RESERVE in N. E. and N. W. quadrants on top, with 5 notches on E. and 1 on W. sides, from which <ul style="list-style-type: none"> A pinion pine, 10 ins. diam., bears N. 33°15' E., 34 lks. dist., marked RES T 32 S R 6 E S 32 B T A pinion, 14 ins. diam., bears S. 17°45' E., 62 lks. dist., marked T 33 S R 6 E S 5 B T A pinion, 12 ins. diam., bears S. 15° W., 38 lks. dist., marked T 33 S R 6 E S 6 B T A pinion, 14 ins. diam., bears N. 30°30' W., 115 lks. dist., marked RES T 32 S R 6 E S 31 B T |
| | Corner falls on hill sloping to W. 50 ft. above draw. |
| | Land, mountainous and precipitous. |
| | Soil, rocky and bare rock, 4th rate. |
| | Timber, pinion, cedar and some scattering pine. |
| | July 25, 1904. |
| <hr/> | |
| | July 26: At corner of secs. 5, 6, 31 and 32, at 7 ^h 06 ^m 15 ^s a.m., l.m.t., I set off 37°59' on the latitude arc and 19°29' N. on the declination arc and establish meridian by solar observation. Magnetic declination 15°48' |
| | Thence I run |
| | East on true line between secs. 5 and 32, through small timber over broken surface, ascending. |
| 10.00 | Top of ascent, bears N. and S., 200 ft. above sec. corner. Line strikes north base of small white sandstone butte, which stands up 30 ft. high 50 lks. south of line. |
| 12.00 | Abrupt descent of 30 ft. over sandstone ledge, bears N. E. and S. W. |

ACUARIUS FOREST RESERVE BOUNDARY.

Tps. 32 and 33 S., R. 6 E.

| | |
|---------|--|
| Chains. | |
| 13.50 | Draw, 5 lks. wide, course S.; continue descent, now gradual, along south slope of mountain. |
| 23.50 | Draw, 5 lks. wide, course S. |
| 29.00 | Begin abrupt descent, bears N. and S. |
| 30.89 | Top of nearly vertical cliff, bears N. 60° E. and S., down which chaining is impossible. |
| | At this point I set cedar pole, 10 ft. long, in mound of stone, 6 ft. base, 3 ft. high, for line mark, also for triangulation point, and proceed to base of cliff in open flat, and set instrument on line by trial test. I then direct rod S. 43°08' W. for 16.63 chs. dist., from which point cedar pole on top of cliff bears N. 63°31' W. |
| | Thence we have $\sin 26^{\circ}29' : \sin 106^{\circ}59' = 16.63 \text{ dist.}$ which gives dist. of 35.73 chs. from top of cliff to instrument or instrument at 66.62 chs. The course of S. 43°08' W. for 16.63 chs. gives Lat. = 12.14 chs. S. Dep. = 11.37 chs. W. Thence from the end of this course I measure West 15.25 chs., thence north 12.14 chs. and at |
| |  |
| 40.00 | Set sandstone 20x14x4 ins., 6 ins. in ground to rock and build mound of stone, 3 ft. base, 1½ ft. high, around same for ¼ sec. corner, marked ¼ on N. face, from which A cedar, 12 ins. diam., bears N. 47°30' E., 43 lks. dist., marked RES ¼ S 32 B T A pinion, 6 ins. diam., bears S. 33° E., 26 lks. dist., marked ¼ S 5 B T Alignment at ¼ sec. corner checked by backsight on cedar pole on top of cliff; by measurement back from ¼ sec. corner and by observation north from offset line the notes on true line read as follows: |
| 38.00 | Draw, 10 lks. wide, course S. 30° E., at base of 600-foot cliff and 800-feet below last summit; begin abrupt rocky ascent, bears N. W. and S. E. |
| 46.00 | Top of 400-foot ascent on south nose of red sandstone pinnacle; begin precipitous descent, bears N. 20° E. and S. 20° W. |
| 58.00 | Base of 500-foot descent, bears N. and S.; thence across open flat. |
| 67.20 | Draw, 10 lks. wide, course S. 20° W. |
| 71.30 | "Grand Gulch" Creek, 20 lks. wide, 8 ft. banks, course S. W.; stream fresh water, 5 lks. wide, 2 ins. deep. |
| 73.00 | Begin ascent, bears N. E. and S. W. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 52, 18 ins. in ground to solid rock and build mound of stone, 5 ft. base, 2½ ft. high, around same, for corner of secs. 4, 5, 32 and 33, marked T 32 S S 33 in N. E. quadrant R 6 E S 4 in S. E. quadrant T 33 S S 5 in S. W. quadrant S 32 in N. W. quadrant RESERVE in N. E. and N. W. quadrants, with 4 notches on E. and 2 on W. sides, from which A pinion, 12 ins. diam., bears N. 47° E., 151 lks. dist., marked RES T 32 S R 6 E S 33 B T A pinion, 12 ins. diam., bears S. 33° E., 86 lks. dist., marked T 33 S R 6 E S 4 B T |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 32 and 33 S., R. 6 E.

chains

A pinion, 10 ins. diam., bears S. $21^{\circ}15'$ W.,
162 lks. dist., marked T 33 S R 6 E S 5
B T

A pinion, 10 ins. diam., bears N. $1^{\circ}45'$ W.,
173 lks. dist., marked RES T 32 S R 6 E
S 32 B T

Land, mountainous and precipitous.

Soil, rocky and sandy, 4th rate.

Timber, small pinion and cedar.

Larger part of day taken up in finding way down
cliff, which is almost impassable.

July 26, 1904.

July 27: At corner of secs. 4, 5, 32 and 33, at
 $7^h06^m15^s$ a.m., l.m.t., I set off $37^{\circ}59'$ on lati-
tude arc and $19^{\circ}15'45''$ N. on the declination arc
and establish meridian by solar observation.
Magnetic declination $15^{\circ}45'$ E.

Thence I run

East on a true line between secs. 4 and 33, through
very scattering timber, ascending.

1.50 Top of ascent, bears N. and S., 40 ft. above sec.
corner; thence over broken surface of bare washed
hard pan formation.

2.90 Dry wash, 5 lks. wide, course N. 30° E.

9.00 Dry wash, 5 lks. wide, course N.

12.50 Dry wash, 5 lks. wide, course N. 30° W.

25.30 Dry wash, 5 lks. wide, course S.

28.50 Draw, 10 lks. wide, course S. 20° W.

40.00 Set sandstone $20 \times 14 \times 4$ ins., 15 ins. in ground, for
 $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which

A pinion, 12 ins. diam., bears N. 41° E., 11
lks. dist., marked RES $\frac{1}{4}$ S 33 B T

A pinion, 8 ins. diam., bears S. $35^{\circ}15'$ E., 32
lks. dist., marked $\frac{1}{4}$ S 4 B T

40.50 Draw, 10 lks. wide, course S. 60° W.

45.00 Wash, 5 lks. wide, course S. W.

51.20 Dry wash, 50 ft. deep, 5 lks. wide at bottom,
course S. W.

53.00 Dry wash, 5 lks. wide, course S. W.; begin abrupt
ascent, bears N. W. and S. E.

68.50 Top of 300-foot ascent on talus of south end of
cliff of a red sandstone ragged butte, the top
of which bears N. about 20.00 chs. dist.

69.00 Begin descent, bears N. E. and S. W.

75.00 Dry wash, 5 lks. wide, course S. E.

79.70 Set U. S. Forest Reserve Boundary Post No. 53, 18 ins.
in ground to rock, and build mound of stone, 5
ft. base, $2\frac{1}{2}$ ft. high, around same for witness
corner to corner of secs. 3, 4, 33 and 34, marked

W C on top above number

T 32 S S 34 in N. E. quadrant

R 6 E S 3 in S. E. quadrant

T 33 S S 4 in S. W. quadrant

S 33 in N. W. quadrant

RESERVE in N. W. quadrant, with 3 notches on
E. and W. sides, from which

A cedar, 14 ins. diam., bears N. $75^{\circ}30'$ E., 52
lks. dist., marked T 32 S R 6 E S 34 B T

A pinion, 10 ins. diam., bears S. 71° E., 69
lks. dist., marked T 33 S R 6 E S 3 B T

A cedar, 14 ins. diam., bears S. $24^{\circ}30'$ W., 34
lks. dist., marked T 33 S R 6 E S 4 B T

A cedar, 10 ins. diam., bears N. 56° W., 52
lks. dist., marked RES T 32 S R 6 E S 33
B T

ACQUARIUS FOREST RESERVE BOUNDARY.

Tps 32 and 33 S., R. 6 E.

| | |
|-----------------|--|
| Chains 80.00 | <p>True point for corner falls in bed of draw, 10 lks. wide, course S. E., 200 ft. below last summit. Land, mountainous and broken. Soil, hardpan and sand rock, 4th rate. Timber, scattering small pinion pine and cedar.</p> <hr/> <p>At this corner I set off 19°12' N. on the declination arc and at 12^h06^m16^s l.m.t., observe sun on the meridian and obtain reading of 37°59' on the latitude arc.</p> <p>T. 32 S., R. 6 E.</p> <p>From true point for corner of secs. 3, 4, 33 and 34, Tps. 32 and 33 S., R. 6 E., which is 30 lks. east of witness corner, I run N. 0°02' W. on true line between secs. 33 and 34, through scattering timber, over broken surface ascending.</p> |
| 18.72 | I offset to east 1.81 chs. to pass end of vertical cliff on east end of red sandstone butte. |
| 24.39 | Offset west 1.81 chs. to true line. Top of cliff opposite 21.00 chs. is about 600 ft. above sec. corner, thence descending bears S. W. and S. E., down talus of cliff over hard pan formation. |
| 40.00 | Set sandstone 20x10x8 ins., 8 ins. in the ground to solid rock and build mound of stone, 3 ft. base, 1 ft. high, around same for $\frac{1}{2}$ sec. corner, marked $\frac{1}{2}$ on W. face, from which <ul style="list-style-type: none"> A pinion, 12 ins. diam., bears N. 14°15' E., 113 lks. dist., marked $\frac{1}{2}$ S 34 B T A pinion, 8 ins. diam., bears N. 29° W., 148 lks. dist., marked RES $\frac{1}{2}$ S 33 B T |
| 43.20 | Dry wash, 3 lks. wide, course N. E. |
| 51.00 | Wash, 3 lks. wide, course N. E. |
| 61.50 | Draw, 10 lks. wide, course N. 70° E. at base of descent, 600 ft. below summit of butte. |
| 66.05 | Draw, 10 lks. wide, course E. 70° E. |
| 69.90 | Draw, 10 lks. wide, course N. 70° E. |
| 79.30 | Draw, 10 lks. wide, course S. 20° E. |
| 80.00 | Set ⁰ / ₁₀ S. Forest Reserve Boundary Post No. 54 1 ft. in ground to solid rock and build mound of stone 5 ft. base, 3 ft. high, around same for corner of secs. 27, 28, 33 and 34, marked <ul style="list-style-type: none"> T 32 S S 27 in N. E. quadrant R 6 E S 34 in S. E. quadrant S 33 in S. W. quadrant S 28 in N. W. quadrant RESERVE in N. W. and S. W. quadrants, with 3 notches on E. and 1 on S. sides, from which <ul style="list-style-type: none"> A pinion, 8 ins. diam., bears N. 73°15' E., 72 lks. dist., marked T 32 S R 6 E S 27 B T A cedar, 14 ins. diam., bears S. 29° E., 27 lks. dist., marked T 32 S R 6 E S 34 B T A cedar, 10 ins. diam., bears S. 14°15' W., 36 lks. dist., marked RES T 32 S R 6 E S 33 B T A cedar, 10 ins. diam., bears N. 34° W., 44 lks. dist., marked RES T 32 S R 6 E S 28 B T <p>Land, precipitous and broken. Soil, sand rock and hardpan, 4th rate. Timber, scattering cedar and pinion pine.</p> |

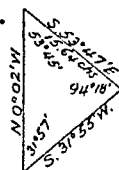
July 27, 1904

In secs. 33 and 34 are some very perfect specimens of petrified wood, variegated in color, occurring

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 6 E.

| | |
|---------|---|
| Chains. | in sections from 6 ins. to 2 ft. long, of white trunks of trees, often 2 ft. in diam. |
| | July 28: At corner of secs. 27, 28, 33 and 34, I set off 38°00' on latitude arc and 19°02' N. on the declination arc and at 7 ^h 06 ^m 15 ^s a.m., l.m.t., establish meridian with solar. Magnetic declination 15°44' |
| | Thence I run |
| | N. 0°02' W. between secs. 27 and 28, over rough broken surface, through timber. |
| 10.00 | Dry wash, 8 lks. wide, course S. E. |
| 13.18 | I set pole 10 ft. long in mound of stone for triangulation point up steep cliff. |
| 15.20 | Draw, 10 lks. wide, course S. E. Begin abrupt ascent up steep talus of cliff; no base at foot being practical I proceed to top of cliff and set up on line by trial test, from instrument, pole bears S. 0°02' E. I then direct rod S. 53°47' E. 15.64 chs. dist., from which point pole bears S. 31°55' W. |
| | Sin 31°57' : Sin 94°18' = 15.64 : dist. from which by nat. functions dist. = 29.47 chs. <u>13.18</u> 42.65 |
| | from which point I chain back on line 6.65 chs. to |
| 36.00 | Top of 300-foot vertical ledge, bears S. W. and S. E. |
| 40.00 | Falls on sandstone boulder 15x15x12 ft. above ground, at the exact point for $\frac{1}{4}$ sec. corner I mark cross (+) with $\frac{1}{4}$ on north side of cross (+) for $\frac{1}{4}$ sec. corner, from which |
| | A cedar, 14 ins. diam., bears N. 59° E., 69 lks. dist., marked $\frac{1}{4}$ S 27 B T |
| | A cedar, 12 ins. diam., bears N. 56° W., 28 lks. dist., marked RES $\frac{1}{4}$ S 28 B T |
| 42.65 | Point for triangulation; top of ascent 800 ft. above draw, bears S. W. and S. E., thence over rolling plateau. |
| 57.40 | Draw, 10 lks. wide, course W. |
| 69.50 | Draw, 12 lks. wide, course N. 80° W. |
| 71.20 | Draw, 10 lks. wide, course S. W. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 55, 2 ft. in ground to solid rock and build mound of stone, 3 ft. base, $1\frac{1}{8}$ ft. high, around same for corner of secs. 21, 22, 27 and 28, marked T 32 S S 22 in N. E. quadrant R 6 E S 27 in S. E. quadrant S 28 in S. W. quadrant S. 21 in N. W. quadrant RESERVE in N. W. and S. W. quadrants, with 3 notches on E. and 2 notches on S. sides, from which |
| | A pinion, 14 ins. diam., bears N. 19° E., 119 lks. dist., marked T 32 S R 6 E S 22 B T |
| | A pinion, 8 ins. diam., bears S. 58°30' E., 33 lks. dist., marked T 32 S R 6 E S 27 B T |
| | A cedar, 14 ins. diam., bears S. 45°45' W., 80 lks. dist., marked RES T 32 S R 6 E S 28 B T |
| | A pinion, 16 ins. diam., bears N. 8°30' W., 138 lks. dist., marked RES T 32 S R 6 E S 21 B T |
| | Land, precipitous and rolling and broken. Soil, sandy and rocky, 4th rate. Timber, pinion pine and cedar. No work in p.m. on account of cloudy weather. July 28, 1904. |



AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 6 E.

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| Chains | July 29: At corner of secs. 21, 22, 27 and 28, at 7 ^h 06 ^m 15 ^s a.m., l.m.t., I set off 38°01' on the latitude arc and 18°48' N. on the declination arc and establish a meridian with the solar. Thence I run |
| | N. 0°02' W. on true line between secs. 21 and 22, over rolling plateau, through timber. |
| 19.00 | Begin abrupt descent, bears N. 70° E. and W. |
| 28.00 | Head of ravine, 200 ft. deep, course W., 1.20 chs. to canyon. |
| 35.00 | Base of 500-foot descent in narrow walled canyon, near head of same, course S. 80° W.; begin abrupt ascent, bears N. 80° E. and S. 80° W. |
| 40.00 | Set sandstone 28x10x8 ins., 12 ins. in the ground to rock and build mound of stone 2½ ft. base, 1 ft. high, around same for ¼ sec. corner, marked ¼ on W. face, from which |
| | A pinion, 14 ins. diam., bears S. 19°45' E., 60 lks. dist., marked ¼ S 22 B T |
| | A pinion, 10 ins. diam., bears N. 62° E., 30 lks. dist., marked RES ¼ S 21 B T |
| | Corner falls on bench of canyon wall. |
| 41.50 | Top of ascent, 500 ft. above draw, bears N. W. and S. 70° E. |
| 47.50 | Begin abrupt descent, bears N. 20° E. and S. W. |
| 50.50 | Descent becomes precipitous, bears N. 5° E. and S. 30° W. |
| 65.00 | Base of 600-foot descent in draw, 10 lks. wide, course S. 20° W. from N. |
| 75.00 | Leave draw, course S. from N. 20° E.; begin precipitous ascent. |
| 79.00 | Top of canyon wall; continue abrupt ascent, bears N. E. and S. 30° W. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 56 1 ft. in ground to solid rock and build mound of stone, 5 ft. base, 3 ft. high, around same for corner of secs. 15, 16, 21 and 22, marked |
| | T 32 S S 15 in N. E. quadrant |
| | R 6 E S 22 in S. E. quadrant |
| | S 21 in S. W. quadrant |
| | S 16 in N. W. quadrant |
| | RESERVE in N. E., N. W. and S. W. quadrants, with 3 notches on E. and S. sides, from which |
| | A cedar, 10 ins. diam., bears N. 70°15' E., 11 lks. dist., marked RES T 32 S R 6 E S 15 B T |
| | A cedar, 14 ins. diam., bears S. 25°45' E., 50 lks. dist., marked T 32 S R 6 E S 22 B T |
| | A pinion, 14 ins. diam., bears S. 28° W., 20 lks. dist., marked RES T 32 S R 6 E S 21 B T |
| | A cedar, 18 ins. diam., bears N. 52° W., 39 lks. dist., marked RES T 32 S R 6 E S 16 B T |
| | Corner falls on S. E., rocky slope, 50 ft. above draw, in bed of canyon. |
| | Land, mountainous and precipitous. |
| | Soil, sandy and rocky, 4th rate. |
| | Timber, small cedar and pinion pine. |
| | Note: Cloudy from 10.30 a.m. to 4 p.m.; no noon observation and no work between these hours. |
| | July 29, 1904 |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 6 E.

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| Chains | July 30: Cloudy weather prevents work before 9 a.m. At corner of secs. 15, 16 21 and 22; at 9 ^h 06 ^m 15 ^s a.m., l.m.t., I set off 38°01'30" on latitude arc and 18°32' N. on the declination arc and establish meridian with the solar. Thence I run East on true line between secs. 15 and 22, through small timber, over broken surface, descending abruptly. |
| 3.20 | Base of 250-foot descent at draw, 10 lks. wide, course S. W.; begin abrupt ascent. |
| 9.70 | Draw, 20 lks. wide, rock bottom, course N. 70° W. |
| 18.40 | Enter draw, 15 lks. wide, course N. 80° W. from E. |
| 20.00 | Leave draw, course W. from S. 80° E. |
| 20.50 | Draw, 5 lks. wide, course S. 80° W. |
| 23.00 | Same draw, course N. 80° W. |
| 32.00 | Top of 700-foot ascent, on ridge, bears N. 30° W. and S. 30° E. |
| 34.00 | Begin descent, bears N. and S. |
| 38.00 | Draw, 5 lks. wide (near head), course N. 20° E.; base of 50-foot descent; thence over rolling surface, sloping to N. |
| 40.00 | Set sandstone 22x14x4 ins., 18 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, from which |
| | A pinion, 16 ins. diam., bears N. 39° E., 30 lks. dist., marked RES $\frac{1}{4}$ S 15 B T |
| | A pinion, 12 ins. diam., bears S. 66°30' E., 7 lks. dist., marked $\frac{1}{4}$ S 22 B T |
| 52.50 | Draw, 3 lks. wide, course N. |
| 64.50 | Open hollow draw, 5 lks. wide, course N. |
| 71.50 | Open swail, 3 chs. wide, drains to N. 20° W. |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 57, 3 ft. in ground, with mound of earth, 4 ft. base, 1 ft. high, around same for corner of secs. 14, 15, 22 and 23, marked |
| | T 32 S S 14 in N. E. quadrant. |
| | R 6 E S 23 in S. E. quadrant |
| | S 22 in S. W. quadrant |
| | S 15 in N. W. quadrant |
| | RESERVE in N. E. and N. W. quadrants, with 2 notches on E. and 3 on S. faces, from which |
| | A pinion, 18 ins. diam., bears N. 74° E., 171 lks. dist., marked RES T 32 S R 6 E S 14 B T |
| | A pinion, 12 ins. diam., bears S. 81° E., 157 lks. dist., marked T 52 S R 6 E S 23 B T |
| | A pinion, 16 ins. diam., bears S. 64° W., 371 lks. dist., marked T 32 S R 6 E S 22 B T |
| | A pinion, 12 ins. diam., bears N. 27°30' W., 345 lks. dist., marked RES T 32 S R 6 E S 15 B T |
| | Land, mountainous and rolling. |
| | Soil, rocky and sandy, 4th rate. |
| | Timber, small pinion-pine and cedar. |
| <hr/> | |
| | At this corner I set off 18°30' N. on the declination arc and at 12 ^h 06 ^m 14 ^s l.m.t., observe sun on meridian and obtain a reading of 38°01'30" on the latitude arc. |
| | From corner of secs. 14, 15, 22 and 23, I run East on true line between secs. 14 and 23. |
| | Magnetic declination 15°40' E.; through scattering timber, over rolling land. |
| 4.50 | Begin abrupt descent, bears N. and S. |
| 7.25 | Head of draw bears S. 60° E. |
| 11.00 | Begin precipitous descent down canyon wall. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 6 E.

| Chains | |
|--------|---|
| 16.00 | Head of canyon draw, course S. 80° E. |
| 20.00 | Base of 900-foot descent in narrow canyon. Draw, 15 lks. wide, course S., heads 10.00 chs. N. of line; begin precipitous ascent. |
| 26.00 | Top of canyon wall; continue abrupt ascent, bears N. and S. |
| 33.30 | Top of 900-foot ascent, bears N. 20° W. and S. 20° E. |
| 34.50 | Begin precipitous descent, bears N. 20° E. and S. |
| 38.62 | Set sandstone 22x16x6 ins., 6 ins. in ground to solid rock and build mound of stone, 3 ft. base, 1½ ft. high, around same for witness corner to 1 sec. corner, marked W C ¼ on N. face, from which <ul style="list-style-type: none"> A pinion, 6 ins. diam., bears N. 63° W., 7 lks. dist., marked RES W C ¼ S 14 B T A pinion, 10 ins. diam., bears S. 51° W., 37 lks. dist., marked W C ¼ S 23 B T |
| 38.70 | Descend over nearly vertical cliff, bears N. 20° E. and S. 30° E. |
| 40.00 | True point for 1 sec. corner falls on side of cliff too steep to be accessible. |
| 54.00 | Base of 800-foot descent at draw, 15 lks. wide, course S. 20° E.; begin ascent over talus of cliff, bears N. 20° W. and S. 20° E. |
| 77.00 | Begin precipitous ascent, bears N. W. and S. |
| 78.60 | Top of 500-foot cliff, bears N. 20° W. and S. |
| 79.90 | Set U. S. Forest Reserve Boundary Post No. 58, 6 ins. in ground to solid rock and build mound of stone, 5 ft. base, 3½ ft. high, around same for witness corner of secs. 13, 14, 23 and 24, marked <ul style="list-style-type: none"> W C on top of cap T 32 S S 13 in N. E. quadrant R 6 E S 24 in S. E. quadrant S 23 in S. W. quadrant S 14 in N. W. quadrant RESERVE in N. E. and N. W. quadrants, with 1 notch on 7. and 3 on S. faces, from which <ul style="list-style-type: none"> A pinion, 12 ins. diam., bears N. 52° E., 77 lks. dist., marked RES W C T 32 S R 6 E S 13 B T A pinion, 9 ins. diam., bears S. 25°45' E., 90 lks. dist., marked W C T 32 S R 6 E S 24 B T A pinion, 12 ins. diam., bears S. 55°45' W., 37 lks. dist., marked W C T 32 S R 6 E S 23 B T A pinion, 14 ins. diam., bears N. 15°30' W., 41 lks. dist., marked RES W C T 32 S R 6 E S 14 B T |
| 80.00 | True point for corner of secs. 13, 14, 23 and 24 falls on rock ledge too steep for mound of stone to stand. Witness corner falls on bench on W. slope of cliff 500 ft. above draw. Land, precipitous and mountainous. Soil, sandy, rocky, 4th rate. Timber, pinion pine and cedar. |

July 30, 1904.

August 1: On account of cloudy and rainy entire day, no work.

August 2: At true point for corner of secs. 13, 14, 23 and 24, which is 10 lks. E. of witness corner, at 7^h06^m a.m., l.m.t., I set off 38°01'30" on latitude arc and 17°49' N. on the declination arc and observe sun on the meridian. Magnetic

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 6 E.

| | |
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| Chains | declination 15°40' E. Thence I run East on true line between secs. 13 and 24, through timber, ascending abruptly. |
| 8.50 | Top of ascent, bears N. and S., 300 ft. above sec. corner. |
| 10.00 | Begin descent, bears N. and S. |
| 12.20 | Descent becomes precipitous. |
| 14.00 | Base of 500-foot descent at ravine in crevasse, 15 lks. wide, course S. 20° E.; begin precipi- tous ascent. |
| 18.90 | Top of canyon wall, bears N. W. and S. 20° E.; con- tinue abrupt ascent. |
| 22.00 | Top of 500-foot ascent, bears N. and S.; thence over rolling plateau. |
| 40.00 | Set sandstone 28x14x3 ins., 21 ins. in ground for ¼ sec. corner, marked ¼ on N. face, from which A pinion, 12 ins. diam., bears N. 69° E., 16 lks. dist., marked RES ¼ S 13 B T A pinion, 14 ins. diam., bears S. 13°30' E., 74 lks. dist., marked ¼ S 24 B T |
| 80.00 | Set U. S. Forest Reserve Boundary Post No. 59, 18 ins. in ground to solid rock, and build mound of stone, 3 ft. base, 2 ft. high, around same for corner of secs. 13, 18, 19 and 24, marked T 32 S S 18 in N. E. quadrant R 7 E S 19 in S. E. quadrant S 24 in S. W. quadrant R 6 E S 13 in N. W. quadrant RESERVE in N. W. quadrant, with 3 notches on N. and S. sides, from which A pinion, 10 ins. diam., bears N. 68°30' E., 48 lks. dist., marked T 32 S R 7 E S 18 B T A yellow pine, 28 ins. diam., bears S. 54° E., 15 lks. dist., marked T 32 S R 7 E S 19 B T A yellow pine, 24 ins. diam., bears S. 42°30' W., 108 lks. dist., marked T 32 S R 6 E S 24 B T A yellow pine, 22 ins. diam., bears N. 26°45' W., 196 lks. dist., marked RES T 32 S R 6 E S 13 B T Land, broken and rolling. Soil, rocky and sandy, 4th rate. Timber, pinion-pine, cedar and some scattering yellow pine. |

At corner of secs. 13, 18, 19 and 24, T. 32 S.,
Rs. 6 and 7 E., I set off 17°45' N. on the de-
clination arc and at 12^h06^m 1.m.t., observe sun
on meridian and obtain a reading of 38°01'30" on
the latitude arc, which agrees with other data.
Cloudy and no work between hours of 2.30 and 4 p.m.

T. 32 S., Rs. 6 and 7 E.

| | |
|-------|---|
| | From corner of secs. 13, 18, 19 and 24 of T. 32 S., Rs. 6 and 7 E., I run North on true line between secs. 13 and 18, over rolling tableland, through timber. Magnetic declination 15°37' E. |
| 28.50 | Open swail drains to N. 60° E. |
| 40.00 | Set sandstone 18x8x4 ins., 12 ins. in the ground for ¼ sec. corner, marked ¼ on W. face, from which A pine, 22 ins. diam., bears N. 58° W., 45 lks. dist., marked RES ¼ S 13 B T A cedar, 14 ins. diam., bears S. 37°15' E., |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., Rs. 6 and 7 E.

| | |
|---------|---|
| Chains. | 93 lks. dist., marked $\frac{1}{2}$ S 18 B T |
| 49.00 | Leave timber, enter sage brush flat, with scattering timber, bears W. and S. E. |
| 80.00 | Set ⁶⁰ U. S. Forest Reserve Boundary Post No. 60, 30 ins. in ground, and build mound of earth, 3 ft. base, 1 ft. high, around same for corner of secs. 7, 12, 13 and 18, marked |
| | T 32 S S 7 in N. E. quadrant |
| | R 7 E S 18 in S. E. quadrant |
| | S 13 in S. W. quadrant |
| | R 6 E S 12 in N. W. quadrant |
| | RESERVE in N. W. and S. W. quadrants, with 2 notches on N. and 4 on S. sides, from which |
| | A pinion, 8 ins. diam., bears N. 28°45' E., 112 lks. dist., marked T 32 S R 7 E S 7 B T |
| | A pinion, 10 ins. diam., bears S. 44°30' E., 348 lks. dist., marked T 32 S R 7 E S 18 B T |
| | A cedar, 10 ins. diam., bears S. 25°45' W., 152 lks. dist., marked RES T 32 S R 6 E S 13 B T |
| | No northwest tree available. |
| | Land, rolling and level. |
| | Soil, sandy, 4th rate. |
| | Timber, pinion, cedar and some scattering yellow and black pine. |
| | August 2, 1904. |
| <hr/> | |
| | August 3: At corner of secs. 7, 12, 13 and 18, T. 32 S., Rs. 6 and 7 E., at 7 ^h 06 ^m a.m., l.m.t., I set off 38°02' on latitude arc and 17°53'15" N. on declination arc and establish meridian with the solar. Magnetic declination 15°40' E. |
| | Thence I run |
| | North on true line between secs. 7 and 12, over rolling sage brush plateau. |
| 20.00 | Enter timber, bears E. and W. |
| 22.00 | Begin descent, bears N. 80° E. and S. 20° W. |
| 25.50 | Draw, 10 lks. wide, course N. W., at base of 50-foot descent, bears W. and S. E.; begin ascent, bears N. W. and S. E. |
| 54.50 | Top of 50-foot ascent, bears N. and S. E.; thence along W. slope of hill. |
| 36.50 | Begin descent, bears N. 20° E. and S. |
| 38.83 | Set sandstone 20x12x4 ins. 6 ins. in ground to solid rock and build mound of stone, 2 $\frac{1}{2}$ ft. base, 1 ft. high, around same for witness corner to $\frac{1}{4}$ sec. corner, marked W C $\frac{1}{4}$ on W. face, from which |
| | A pinion, 10 ins. diam., bears S. 28°30' E., 14 lks. dist., marked W C $\frac{1}{4}$ S 7 B T |
| | A cedar, 10 ins. diam., bears S. 36° W., 35 lks. dist., marked RES W C $\frac{1}{4}$ S 12 B T |
| 38.90 | Descent becomes precipitous. |
| 40.00 | True point for $\frac{1}{4}$ sec. corner falls on side of canyon wall too steep to set corner. |
| 58.00 | Base of 500-foot descent at draw, in canyon, 20 lks. wide, course N. 60° E.; begin precipitous ascent, bears N. 60° E. and W. |
| 70.25 | Top of 500-foot ascent, bears N. 60° E. and W. |
| 78.00 | Leave timber, enter sage brush plateau, bears N. E. and W. |
| 80.00 | Set ⁶¹ U. S. Forest Reserve Boundary Post No. 61, 2 ft. in ground to rock and build mound of stone, 3 ft. base, 1 $\frac{1}{2}$ ft. high, around same for corner of secs. 1, 6, 7 and 12, marked |
| | T 32 S S 6 in N. E. quadrant |
| | R 7 E S 7 in S. E. quadrant |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., Rs. 6 and 7 E.

Chains

S 12 in S. W. quadrant
 R 6 E S 1 in N. W. quadrant
 RESERVE in N. W. and S. W. quadrants, with 1
 notch on N. and 5 on S. faces, from which
 A pinion, 5 ins. diam., bears N. 72°15' E.,
 160 lks. dist., marked T 32 S R 7 E S 6 B T
 A cedar, 14 ins. diam., bears S. 38°45' E.,
 242 lks. dist., marked T 32 S R 7 E S 7 B T
 A pinion, 14 ins. diam., bears S. 21° W., 355
 lks. dist., marked RES T 32 S R 6 E S 12
 B T
 A pinion, 10 ins. diam., bears N. 48°15' W.,
 95 lks. dist., marked RES T 32 S R 6 E
 S 1 B T

Land, precipitous and level.
 Soil, rocky and sandy, 4th rate.
 Timber, small pinion pine and cedar.

At this corner I set off 17°29' N. on the declina-
 tion arc and at 12^h06^m l.m.t., observe sun on the
 meridian and obtain a reading of 38°03' on the
 latitude arc.

From corner of secs. 1, 6, 7 and 12 I run
 North on true line between secs. 1 and 6, over
 sage brush plateau, through scattering timber.
 20.00 Enter timber, bears N. 80° E. and S. 80° W.; begin
 gradual ascent, bears N. 70° E. and S. 70° W.
 26.00 Top of 30-foot ascent, bears N. 80° E. and S. 80° W.
 29.00 Begin gradual descent, bears N. 80° E. and S. 80° W.
 38.15 Draw, 10 lks. wide, course N. 80° E., at base of
 50-foot descent; begin ascent, bears N. 80° W.
 and S. 80° E.
 40.00 True point for $\frac{1}{2}$ sec. corner falls in draw, 10 lks.
 wide, course S. 80° E.
 40.20 Set sandstone 28x16x6 ins., 10 ins. in ground to
 rock and build mound of stone, 3 ft. base, 1 ft.
 high around same, for witness corner to $\frac{1}{2}$ sec.
 corner, marked W C $\frac{1}{2}$ on W. face, from which
 A pinion, 10 ins. diam., bears S. 55° E., 24
 lks. dist., marked W C $\frac{1}{2}$ S 6 B T
 A pinion, 20 ins. diam., bears N. 81°45' W.,
 45 lks. dist., marked RES W C $\frac{1}{2}$ S 1 B T
 42.20 Vertical ledge, 20 ft. high, bears E. and W.
 43.00 Top of abrupt ascent, continue gradual ascent, bears
 E. and W.
 54.00 Top of gradual ascent, bears E. and W., 100 ft.
 above draw/
 55.00 Begin abrupt descent, bears N. 80° W. and E.
 54.83 Set flag pole in mound of stone for line marking
 and test backsights.
 63.51 Begin precipitous descent over nearly vertical
 cliff, bears N. W. and S. E., down which chain-
 ing is impossible. To ascertain distance I erect
 pole 5 ft. long in mound of stone at this point;
 I proceed to bottom of cliff to N. and set up in-
 strument on line due north of pole by trial test
 and direct rod S. 42°40' E. 11.30 chs. dist.,
 from which point pole on top of cliff bears
 S. 30°03' W.
 $\sin 30^{\circ}03' : \sin 107^{\circ}17' = 11.30 \text{ chs.} : \text{dist.}$
 $50076 : 95485 = 11.30 \text{ chs.} : \text{dist.}$
 from which
 dist. = 21.54 chs.
 $63.51 + 21.54 = 85.05$
 I then measure south from
 point of triangulation, a

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., Rs. 6 and 7 E.

Chains
80.00

dist. of 5.05 chs., and at
Set ^{1/2} U. S. Forest Reserve Boundary Post No. 62, 2
ft. in ground to rock and build mound of stone
3 1/2 ft. base, 1 1/2 ft. high, around same for cor-
ner of Tps. 31 and 32 S., Rs. 6 and 7 E.,
marked
T 31 S S 31 in N. E. quadrant
R 7 E S 6 in S. E. quadrant
T 32 S S 1 in S. W. quadrant
R 6 E S 36 in N. W. quadrant
Reserve in N. W. and S. W. quadrants, with 6
notches on N., S., E. and W. sides, from which
A pinion, 10 ins. diam., bears N. 22°45' E.,
34 lks. dist., marked T 31 S R 7 E S 31
B T
A pinion, 10 ins. diam., bears S. 13°45' E.,
28 lks. dist., marked T 32 S R 7 E S 6 B T
A pinion, 14 ins. diam., bears S. 84°15' W.,
64 lks. dist., marked RES T 32 S R 6 E
S 1 B T
A pinion, 10 ins. diam., bears N. 61°30' W.,
75 lks. dist., marked RES T 31 S R 6 E
S 36 B T
Corner falls on talus of cliff 850 ft. below sum-
mit on east slope of foothill.
Land, rolling and precipitous.
Soil, rocky and sandy, 4th rate.
Timber, pinion and cedar.
Cloudy 3 to 5.30 p.m., no work.

August 3, 1904.

GENERAL DESCRIPTION T. 32 S., R. 6 E.

T. 32 S., R. 6 E., is mountainous and rough. A
cliff about 800 to 900 ft. high of red sandstone,
with nearly vertical wall of 300 to 400 ft.
comes in from south in sec. 32 and goes out on
east in sec. 24, cutting off the southeast 1/4 of
the township, which is composed of rolling foot-
hills, flats and high buttes. The northeast 1/4
of township is flat and rolling plateau cut by
deep canyons draining to northeast. The western
portion rises to west forming foothills of Aquar-
ius plateau and drains to southeast. Grand
Gulch and tributaries head in secs. 15, 16, 20
and 29 and form short canyons where they break
down cliffs, and is stream of fresh water about
8 lks. wide, 2 ins. deep, and leaves township on
south boundary of sec. 32. Timber is all small
and very little grass except in plateau in north-
east portion, which has some grass. Formation is
red sandstone which washes into steep canyon.
The foothills in southeast 1/4 is of hard pan and
sandstone formation badly washed and nearly bar-
ren; contains many specimens of variagated col-
ored petrified tree trunks, ranging from 6 ins.
to 2 ft. in diameter.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

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| | August 4: |
| Chains. | At corner of townships 31 and 32 S., Rs. 6 and 7 E., I set off 38°04' on latitude arc and 17°17½' N. on declination arc, and at 7 ^h 06 ^m a.m., l.m.t. determine meridian with solar. Magnetic declination 15°42' E. |
| | Thence I run |
| | North between secs. 31 and 36, through timber along east slope of foothill. |
| ...50 | Begin descent, bears N. W. and S. 20° E. |
| 3.20 | Base of 90-foot descent at draw, 10 lks. wide, course N. W.; begin ascent. |
| 5.20 | Top of 50-foot ascent, bears N. W. and S. E., begin descent. |
| 7.10 | Base of 50-foot descent at draw, 10 lks. wide, course N. W.; begin ascent bears N. W. and S. E. |
| 14.80 | Top of 80-foot ascent, bears N. W. and S. E. |
| 16.00 | Begin descent, bears N. W. and S. E. |
| 18.30 | Base of 50-foot descent at draw, 10 lks. wide, course N. W.; thence along west slope of side hill. |
| 25.25 | Draw, 10 lks. wide, course S. 70° W.; begin ascent bears N. 70° E. and S. 70° W. |
| 27.00 | Top of 30-foot ascent; begin descent, bears N. 20° E. and S. 20° W. |
| 39.50 | Draw, 15 lks. wide, course N. 70° W., at base of 90-foot descent. |
| 40.00 | Set sandstone 24x14x6 ins., 18 ins. in ground, for ¼ sec. corner, marked ¼ on W. face, from which |
| | A cedar, 10 ins. diam., bears N. 34°30' E., 45 lks. dist., marked ¼ S 31 B T |
| | A pinion, 10 ins. diam., bears N. 72°45' W., 129 lks. dist., marked RES ¼ S 36 B T |
| | Corner falls on west slope of foothill. |
| 44.00 | Elbow of South Fork of Oak Creek, a dry stream, 25 lks. wide, banks 15 ft. deep, course N. 20° W. from S. W. |
| 47.20 | Draw, 5 lks. wide, course N. 80° W. |
| 50.50 | Draw, 5 lks. wide, course N. 80° W. |
| 54.50 | Elbow of South Fork Oak Creek, course N. 20° W., from S. 30° W. |
| 58.50 | Enter South Fork Oak Creek, course N. from S. 20° W. |
| 62.80 | Leave creek, course N. 30° W. from S. |
| 67.50 | South Fork Oak Creek, 30 lks. wide, course N. 60° E. |
| 72.50 | Same creek, course N. 60° W. |
| 76.00 | Same creek, course N. 60° E. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 63 30 ins. in ground, and build mound of earth 3½ ft. base, 1 ft. high, around same for corner of secs. 25, 30, 31 and 36, marked |
| | T 31 S S 30 in N. E. quadrant |
| | R 7 E S 31 in S. E. quadrant |
| | S 36 in S. W. quadrant |
| | R 6 E S 25 in N. W. quadrant |
| | RESERVE in N. W. and S. W. quadrants, with 1 notch on S. and 5 on N. face, from which |
| | A cottonwood, 8 ins. diam., bears N. 30°30' E., 20 lks. dist., marked T 31 S R 7 E S 30 B T |
| | A cottonwood, 10 ins. diam., bears S. 32° E., 3 lks. dist., marked T 31 S R 7 E S 31 B T |
| | A cottonwood, 8 ins. diam., bears S. 65°30' W., 264 lks. dist., marked RES T 31 S R 6 E S 36 B T |
| | A cedar, 12 ins. diam., bears N. 15°30' W., 77 lks. dist., marked RES T 31 S R 6 E S 25 B T |
| | Land, hilly and rolling. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

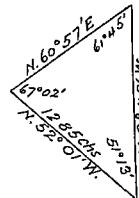
Chains. Soil, rocky, hardpan and sandy, 4th and 3rd rates. Timber, pinion-pine, cedar and cottonwood.

At this corner I set off $17^{\circ}13'15''$ N. on declination arc and at $12^{\text{h}}05^{\text{m}}55^{\text{s}}$ l.m.t., observe sun on the meridian and obtain a reading of $38^{\circ}05'$ on the latitude arc.

From corner of secs. 25, 30, 31 and 36, I run North on true line, between secs. 25 and 30, over rolling bottom land, through cottonwood timber and sage brush.

2.65 Oak Creek, 30 lks. wide, 12-foot banks, stream fresh water, 5 lks. wide, 3 ins. deep, course S. 80° E. for 5.00 chs., then N. 60° E.
11.50 Draw, 10 lks. wide, course S. 80° E.; begin ascent, bears N. 80° W. and S. 80° E.
22.00 Draw, 10 lks. wide, course S. E.

28.67 To ascertain distance up cliff ahead and on account of steep sloping rock on top of cliff, it being impossible to direct flag on line to a point near enough edge of cliff to be sure, I direct rod on top of cliff N. $0^{\circ}48'$ W., and from instrument lay off base at foot of cliff N. $52^{\circ}01'$ W. for 12.85 chs., from which point rod on top of cliff bears N. $60^{\circ}57'$ E. Thence,
Sin $61^{\circ}45'$: Sin $67^{\circ}02'$ =12.85:dist.
.88089:.92073=12.85:13.43
28.67+13.43=42.10
and rod is 17 lks. W. of true line.
offset E. 17 lks. to true line.



39.25 At foot of vertical ledge and mark cross (+) and W C $\frac{1}{4}$ on W. side of same on sandstone ledge in place for witness corner to $\frac{1}{4}$ sec. corner, from which
A cedar, 8 ins. diam., bears S. $71^{\circ}15'$ E., 33 lks. dist., marked W C $\frac{1}{4}$ S 30 B T
A pinion, 6 ins. diam., bears N. $69^{\circ}30'$ W., 49 lks. dist., marked RES W C $\frac{1}{4}$ S 25 B T
40.00 True point for $\frac{1}{4}$ corner falls on nearly level vertical cliff, inaccessible.
42.10 Rod on top of vertical cliff, from which point I measure 17 lks. E. to true line.
47.20 Top of precipitous ascent, bears N. W. and S. E., 850 ft. above Oak Creek and 450 ft. above witness $\frac{1}{4}$ sec. corner.
54.90 Begin precipitous descent, bears N. 60° W. and S. 60° E.
70.00 Base of 700-foot descent at draw, 10 lks. wide, course S. 80° E.; begin precipitous ascent.
80.00 True point for corner of secs. 19, 24, 25 and 30 falls on steep side of cliff at impractical place for corner.
82.60 I mark cross (+) on solid sandstone ledge, with 2 notches on S. and 4 on N. and W C alongside.

(W + C), over which point I set iron U. S. Forest Reserve Boundary Post No. 64, in mound of stone, 6 ft. base, $3\frac{1}{2}$ ft. high, for witness corner to corner of secs. 19, 24, 25 and 30, 2.60 chs. N. of true point, marked
W C on top of cap
T 31 S S 19 in N. E. quadrant
R 7 E S 30 in S. E. quadrant

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

Chains.

S 25 in S. W. quadrant
 R 6 E S 24 in N. W. quadrant
 RESERVE in N. W. and S. W. quadrants, with 2 notches
 on S. and 4 on N. sides, from which
 A pinion, 6 ins. diam., bears N. $57^{\circ}45'$ E., 71
 lks. dist., marked W C T 31 S R 7 E S 19
 B T
 A pinion, 5 ins. diam., bears S. $66^{\circ}30'$ E., 45
 lks. dist., marked W C T 31 S R 7 E S 30
 B T
 A pinion, 6 ins. diam., bears N. $10^{\circ}30'$ W., 100
 lks. dist., marked RES W C T 31 S R 6 E
 S 24 B T

No southwest tree available.

Witness corner falls on point of sandstone rock,
 projecting to south and 550 ft. above last draw.
 Land, mountainous and precipitous.
 Soil, rocky and sandy, 4th rate.
 Timber, small pinion-pine and cedar.

August 4, 1904.

August 5: At witness corner to corner of secs. 19,
 24, 25 and 30, which is 2.60 chs. N. of true
 corner point, at $7^{\text{h}}05^{\text{m}}49^{\text{s}}$ a.m., l.m.t., I set off
 $38^{\circ}06'$ on latitude arc and $17^{\circ}01'30''$ N. on de-
 clination arc and determine true meridian with the
 solar. Magnetic declination $15^{\circ}45'$ E.

Thence I run

North on true line between secs. 19 and 24, ascend-
 ing abruptly through timber, counting measurement
 from true corner point.

20.00 Top of ascent, bears N. W. and S. 20° E., 200 ft.
 above witness corner.

23.00 Begin descent, bears N. 20° W. and S. 20° E.

32.00 Base of 50-foot descent, bears N. 20° W. and S. 20° E.

33.00 Head of draw, course S. 20° E.; begin ascent,
 bears N. and S. 20° E.

40.00 Set sandstone $26 \times 14 \times 8$ ins., 6 ins. in ground, to
 solid rock and build mound of stone, $3\frac{1}{2}$ ft. base,
 $1\frac{1}{2}$ ft. high, around same for $\frac{1}{4}$ sec. corner, mark-
 ed $\frac{1}{4}$ on W. face, from which

A pinion, 8 ins. diam., bears N. $8^{\circ}45'$ E., 10
 lks. dist., marked $\frac{1}{4}$ S 19 B T

A pinion, 10 ins. diam., bears S. $59^{\circ}30'$ W.,
 22 lks. dist., marked RES $\frac{1}{4}$ S 24 B T

44.00 Top of 100-foot ascent, bears N. 80° W. and S. 80° E.

Begin descent, bears N. 80° W. and S. 80° E.

At this point at $9^{\text{h}}05^{\text{m}}45^{\text{s}}$ a.m., l.m.t., I set off
 $38^{\circ}06'30''$ on the latitude arc and $16^{\circ}59'30''$ N. on
 the declination arc and establish meridian with
 solar for test sight on flag pole set between
 secs. 1 and 6 of T. 32 S., Rs. 6 and 7 E., and
 find same bears due south.

46.12 I set flag pole in mound of stone for line marking
 on summit and for test back sight from the north.

55.00 Rocky draw, 10 lks. wide, course N. W.

61.00 Rocky wash, course N. 80° W., at base of 400-foot
 descent, begin abrupt ascent.

62.40 Summit of 100-foot ascent on point of rock pro-
 jecting to west; begin precipitous descent, bears
 E. and W.

62.42 Set pole, 6 ft. long in mound of stone for trian-
 gulation point and proceed to base of cliff and
 set instrument on line due north of pole by trial
 tests. From instrument I direct rod S. $85^{\circ}22'$ E.
 for 17.00 chs. dist., from which point pole on
 top of cliff bears S. $36^{\circ}35'$ W., from which we

AQUARIUS FOREST RESERVE BOUNDARY.

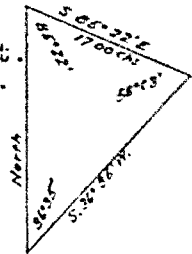
T. 31 S., Rs. 6 and 7 E.

Chains

derive the following proportion:
 $\sin 36^\circ 35' : \sin 58^\circ 03' = 17.00 \text{ chs. dist.}$
 $.59599 : 84851 = 17.00 \text{ chs.} : 24.20 \text{ chs.}$

$62.42 + 24.20 = 86.62$

Thence I measure south 6.62 chs. to



80.00

True point for corner of secs. 13, 18, 19 and 24 falls between two large boulders at impractical point to set corner.

80.38

I set iron U. S. Forest Reserve Boundary Post No. 65, 2 ft. in ground to rock, and build mound of stone, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, around same for witness corner to corner of secs. 13, 18, 19 and 24, marked W C on top of cap;

T 31 S S 18 in N. E. quadrant,

R 7 E S 19 in S. E. quadrant,

S 24 in S. W. quadrant,

R 6 E S 13 in N. W. quadrant,

RESERVE in N.W. and S.W. quadrants, with 3 notches on N. and S. faces, from which

A pinion, 10 ins. diam., bears N. $52^\circ 15'$ E., 20 lks. dist., marked W C T 31 S R 7 E S 18 B T

A pinion, 14 ins. diam., bears S. 48° E., 94 lks. dist., marked W C T 31 S R 7 E S 19 B T

A pinion, 12 ins. diam., bears S. 10° W., 123 lks. dist., marked RES W C T 31 S R 6 E S 24 B T

A cedar, 10 ins. diam., bears N. $20^\circ 30'$ W., 36 lks. dist., marked RES W C T 31 S R 6 E S 13 B T

Corner falls on N. slope of talus of cliff 780 ft. below summit.

Land, mountainous and precipitous.

Soil, rocky and sandy, 4th rate.

Timber, small pinion-pine and cedar.

At the triangulation point on line 6.62 chs. N. of this corner, at $5^{\text{h}}05^{\text{m}}49^{\text{s}}$ p.m., l.m.t., I set off $38^\circ 07'$ on latitude arc and $16^\circ 54' 45''$ N. on declination arc and establish meridian with solar and mark line thus determined by flag pole in top of cliff to the south.

In order to test line and instrument by Polaris observation I proceed as follows: With instrument in same position, I observe Polaris in accordance with Manual of Instructions at $8^{\text{h}}10^{\text{m}}$ p.m., l.m.t. and mark line thus determined by tack in hub 6.00 chs. N. of my station.

U. C. Polaris Aug. 1, 16^h42.8^m

Reduction to Aug. 5, 15.7

U. C. Aug. 5, 16^h27^m

Time of observation Aug. 5, 8 10

Time-argument and hour angle = 8^h17^m

Gives azimuth of Polaris, 1[°]14 $\frac{1}{2}$ ' E.

August 6:

At $6^{\text{h}}40^{\text{m}}$ a.m., I direct instrument to hub set last night and turn off the azimuth of Polaris $1^\circ 14\frac{1}{2}'$ to the west and reverse telescope and find flag on top of cliff to the south bears due south.

At $7^{\text{h}}05^{\text{m}}43^{\text{s}}$ a.m., l.m.t., I set off $38^\circ 07'$ on latitude arc and $16^\circ 45'$ N. on the declination arc, and

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

| | |
|---------|---|
| Chains. | find by directing telescope to flag pole to the south that a.m. and p.m. observations agree with meridian established by polaris observation. |
| | August 6: From true point for corner of secs. 13, 18, 19 and 24, which is 38 lks. south of W. C., I run |
| | North on true line, between secs. 13 and 18, through timber, descending over rocky broken land. |
| | Magnetic declination $15^{\circ}55'$. |
| 6.60 | Dry branch, 20 lks. wide, 10 ft. banks, course E. (small stream of water in branch 10 chs. W. of line, but sinks), base of descent 150 ft. below sec. corner begin abrupt ascent; bears E. and W. |
| 12.65 | Top of 250-foot ascent on top of vertical ledge, bears N. 60° E. and S. 60° W. |
| 14.00 | Top of ridge at east end, bears N. 30° W., 280 ft. above branch. |
| 15.30 | Begin abrupt descent over 50-foot vertical ledge, bears N. 30° W. and S. 30° E. |
| 21.00 | Base of 180-foot descent on east slope of hill at wash 5 lks. wide, course S. 80° E.; thence ascending along steep east slope. |
| 31.00 | Top of 100-foot ascent on bare hardpan ridge, bears N. 30° E. and S. 30° W.; thence over badly washed hardpan surface, cut up by innumerable small washes. |
| 36.50 | Draw, 15 lks. wide, course S. W. |
| 39.50 | Draw, 20 lks. wide, course S. 20° E.; thence gradually ascending over broken and washed surface, bears E. and W. |
| 40.00 | Set sandstone $24 \times 8 \times 6$ ins., 18 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 10 ins. diam., bears S. $52^{\circ}30'$ E., 85 lks. dist., marked $\frac{1}{4}$ S 18 B T A pinion, 10 ins. diam., bears N. $83^{\circ}30'$ W., 11 lks. dist., marked RES $\frac{1}{4}$ S 13 B T |
| 42.40 | Draw, 20 lks. wide, course S. W. |
| 47.15 | Horse Trail, bears N. 20° W. and S. 20° E. |
| 47.25 | Draw, 5 lks. wide, course S. E. |
| 50.90 | Draw, 10 lks. wide, course S. E. |
| 61.70 | Elbow of draw, 20 lks. wide, course S. 20° E. from N. 20° E., 30 ft. deep. |
| 65.00 | Same draw, course S. 20° E. |
| 68.00 | Elbow of same draw, course S. W. from N. W. |
| 70.70 | Draw, 10 lks. wide, 30 ft. deep, course S. W. |
| 75.00 | Draw, 10 lks. wide, 30 ft. deep, course S. W. |
| 78.00 | Draw, 10 lks. wide, 30 ft. deep, course S. W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 66, 2 ft. in ground and build mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, around same for corner of secs. 7, 12, 13 and 18, marked T 31 S S 7 in N. E. quadrant R 7 E S 18 in S. E. quadrant S 13 in S. W. quadrant R 6 E S 12 in N. W. quadrant RESERVE in N. W. and S. W. quadrants, with 2 notches on N. and 4 on S. sides, from which A pinion, 6 ins. diam., bears N. $26^{\circ}30'$ E., 132 lks. dist., marked T 31 S R 7 E S 7 B T A cedar, 8 ins. diam., bears S. $52^{\circ}45'$ W., 125 lks. dist., marked RES T 31 S R 6 E S 13 B T A pinion, 8 ins. diam., bears N. $29^{\circ}45'$ W., 135 lks. dist., marked RES T 31 S R 6 E S 12 B T No trees available in southeast quadrant. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E. -

| | |
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| Chains. | <p>Corner falls on northwest slope of small hardpan ridge, 200 ft. above draw. Draw at 39.50. Land, precipitous and broken. Soil, bare washed hardpan and rocky, 4th rate. Timber, very scattering small pinion-pine and cedar.</p> <hr/> <p>At this corner I set off 16°41' N. on the declination arc and at 12^h05^m43^s l.m.t., observe sun on meridian and obtain a reading of 38°08' on latitude arc.</p> <p>From corner of secs. 7, 12, 13 and 18, I run North on true line between secs. 7 and 12 over hilly broken surface of hardpan and sand rock, cut up by small washes, through scattering timber. Magnetic declination 16°00' E.</p> <p>2.50 Draw, 10 lks. wide, 20 ft. deep, course S. W. 12.00 Draw, 10 lks. wide, 20 ft. deep, course S. W. 18.20 Draw, 10 lks. wide, 30 ft. deep, course S. W. 23.00 Draw, 10 lks. wide, 20 ft. deep, course S. W. 28.30 Draw, 10 lks. wide, 10 ft. deep, course S. W.; timber becomes thicker.</p> <p>32.50 Draw, 8 lks. wide, course S. W. 35.60 Draw, 10 lks. wide, course S. W. 38.60 Draw, 10 lks. wide, 20 ft. deep, course S. W. 40.00 Set red sandstone 26x12x6 ins., 18 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 10 ins. diam., bears S. 51°30' E., 21 lks. dist., marked $\frac{1}{4}$ S 7 B T A pinion, 12 ins. diam., bears S. 18° W., 17 lks. dist., marked RES $\frac{1}{4}$ S 12 B T</p> <p>50.50 Draw, 10 lks. wide, 10 ft. deep, course S. W. 57.60 Draw, 10 lks. wide, 10 ft. deep, course S. W. 62.90 Draw, 10 lks. wide, 10 ft. deep, course S. W. 68.00 Top of ascent, 400 ft. above sec. corner, on divide in saddle, bears N. 60° W. and S. E. 68.50 Begin descent, bears N. 60° W. and S. 60° E. 76.10 Draw, 10 lks. wide, course N. 60° E.; at base of 80-foot descent; begin ascent.</p> <p>79.90 Set iron U. S. Forest Reserve Boundary Post No. 67, 30 ins. in ground, and build mound of stone, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, around same for witness corner to corner of secs. 1, 6, 7 and 12, marked W C on top of cap T 31 S S 6 in N. E. quadrant R 7 E S 7 in S. E. quadrant S 12 in S. W. quadrant E 6 E S 1 in N. W. quadrant RESERVE in N. W. and S. W. quadrants, with 1 notch on N. and 5 notches on south sides, from which A pinion, 12 ins. diam., bears N. 45° E., 23 lks. dist., marked W C T 31 S R 7 E S 6 B T A pinion, 14 ins. diam., bears S. 12°15' E., 84 lks. dist., marked W C T 31 S R 7 E S 7 B T A pinion, 16 ins. diam., bears S. 30°15' W., 146 lks. dist., marked RES W C T 31 S R 6 E S 12 B T A pinion, 10 ins. diam., bears N. 75°15' W., 185 lks. dist., marked RES W C T 31 S R 6 E S 1 B T</p> <p>80.00 True point for corner of secs. 1, 6, 7 and 12 falls on sandstone boulder; impractical place for post. Land, mountainous and broken. Soil, hardpan and sand rock, 4th rate. Timber, pinion-pine.</p> |
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August 6, 1904.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

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| | August 8: |
| Chains. | At corner of secs. 1, 6, 7 and 12, T. 31 S., Rs. 6 and 7 E., at 7 ^h 05 ^m 30 ^s a.m., l.m.t., I set off 37°08'30" on latitude arc and 16°12' N. on the declination arc, and establish meridian with solar. Magnetic declination 16°05' E. Thence I run North on true line between secs. 1 and 6, through timber ascending. Magnetic declination 16°10'. |
| 1.10 | Top of 30-foot ledge, bears N. 20° E. and S. W. |
| 4.00 | Begin descent, bears E. and W. |
| 7.80 | Draw, 5 lks. wide, course N. 70° E., at base of 40-foot descent; thence over rolling and broken surface. |
| 31.00 | Draw, 10 lks. wide, course N. 70° E. |
| 40.00 | Set sandstone 24x14x6 ins., 18 ins. in the ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 10 ins. diam., bears S. 85°30' E., 73 lks. dist., marked $\frac{1}{4}$ S 6 B T A pinion, 10 ins. diam., bears N. 82°30' W., 46 lks. dist., marked RES $\frac{1}{4}$ S 1 B T |
| 69.80 | Draw, 10 lks. wide, course N. 70° E.; begin ascent. |
| 79.00 | Top of 80-foot ascent, bears E. and W. At this point at 9 ^h 05 ^m 30 ^s a.m., I set off 37°09' on the latitude arc and 16°09'30" N. on the declina- tion arc and establish meridian with solar and backsight on flag pole set in mound of stone at 46.12 chs. between secs. 19 and 24, and find same bears due south. |
| 83.00 | Draw, 10 lks. wide, course N. 70° E. |
| 97.00 | Begin descent, bears N. 60° E. and S. 60° W. |
| 102.00 | Draw, 15 lks. wide, course N. 60° E., at base of 150-foot descent, begin ascent. |
| 107.00 | Top of 100-foot ascent, on east side of cliff, begin descent, bears E. and W. |
| 112.80 | Draw, 15 lks. wide, course E., at base of 100-foot descent; begin ascent. |
| 115.00 | Top of 100-foot ascent, bears N. 80° E. and W. |
| 115.25 | Intersect 6th Standard Parallel South 31.36 chs. S. 89°02' E. of standard corner to secs. 31 and 32, T. 30 S., R. 7 E., and 8.90 chs. N. 89°02' W. of $\frac{1}{4}$ S. C. on south boundary of sec. 32, at which point I set iron U. S. Forest Reserve Boundary post No. 68, 18 ins. in ground to rock and build mound of stone, 5 ft. base, 2 ft. high, around same, for C. C. of T. 31 S., Rs. 6 and 7 E., marked C C on top of cap on south side of center T 31 S on south beveled edge R 7 E S 6 in S. E. quadrant R 6 E S 1 in S. W. quadrant RESERVE in S. W. quadrant on top of cap, with 6 notches on S., E. and W. faces, from which A pinion, 12 ins. diam., bears S. 52° E., 129 lks. dist., marked C C T 31 S R 7 E S 6 B T A pinion, 10 ins. diam., bears S. 30°30' W., 75 lks. dist., marked RES C C T 31 S R 6 E S 1 B T |
| | Land, hilly and broken. Soil, hardpan and sandy rocky, 4th rate. Timber, small pinion-pine and cedar. |

Too cloudy for noon observation.

Note: This line should close theoretically 16.98
chs. W. of S. C. T. 30 S., Rs. 6 and 7 E. There
is therefore some large error in the old survey
to the northwest.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., Rs. 6 and 7 E.

chains.

General Description, T. 31 S., R. 6 E.

T. 31 S., R. 6 E., is composed of rough, mountainous, rocky and precipitous lands; and in portions, of hilly, rolling and level benches and flats. The northeast and north central portion is traversed by Pleasant Creek, a bold fresh water stream about 20 lks. wide and 12 inches deep. Along this stream and to the south of it are open flats and benches, which could be made fertile. The township drains to the east and northeast. The southern portion is traversed by Oak Creek, a stream of fresh water, 5 lks. wide, 2 ins. deep, flowing in an easterly direction. Bottom lands along this stream are narrow and lie between steep canyon walls 800 feet high. The western portion of township contains foothills of Aquarius Plateau and has some merchantable timber. Formation is of sandstone in southeast; sandstone substrata in west, with lava or trachyte top strata, and changes to limestone in northeast, with trachyte caps on hills.

I install J. J. Elliot and A. B. McAntire as extra chainmen on Sixth Standard Parallel South and have them rechain same after line is run through with them as moundman and rodman.

SIXTH STANDARD PARALLEL SOUTH, R. 7 E.

Prior to setting C C of T. 31 S., Rs. 6 and 7 E., previously described, I retrace the Sixth Standard Parallel South, beginning at S C of secs. 31 and 32, T. 30 S., R. 7 E., which is a sandstone (instead of quartzite as called for) 12x4x5 ins. above ground and witnessed by a pinion-pine 5 inches in diam. N. 12°45' E., 14 lks. dist., (instead of a pine 5 ins. diam., N. 10° E. 14 lks. dist., as called for by notes), marked S C T 30 S R 7 E S 32 B T

I also take for witness tree

A pinion, 6 ins. diam., bears N. 45°15' W., 34 lks. dist., marked S C T 30 S R 7 E S 31 B T

There is also a pinion improperly marked in S. W. quadrant.

Thence from this corner I run

East on random retracement line, along south boundary of sec. 32; 40.22 by 1st chainman, 40.30 by second set, the mean of which is

40.26 $\frac{1}{4}$ S C bears S. 68 lks.

Thence from $\frac{1}{4}$ sec. corner I run

N. 89°02' W. on true retracement line on west half of south boundary of sec. 32, through timber, ascending.

7.00 Top of ascent, 100 ft. above $\frac{1}{4}$ sec. corner, bears N. E. and S. 60° W.

8.90 Intersection with range line between Rs. 6 and 7 E., through T. 31 S., set temporary corner.

26.70 Begin descent, bears N. and S.

37.70 Draw, 10 lks. wide, course N. 60° E., base of 100-foot descent.

40.26 At S. C. of secs. 31 and 32, T. 30 S., R. 7 E.

Land, hilly and broken.

Soil, sandy and rocky, 4th rate.

Timber, pinion and cedar.

No work between 1 and 3 p.m. on account of cloudy weather.

August 8, 1904

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel South, R. 7 E.

| | |
|---------|--|
| Chains. | From S. C. of secs. 31 and 32, T. 30 S., R. 7 E., I run |
| | West on random retracement line along south bound- ary of sec. 31, at 40.00 by 1st set chainmen, |
| 39.93 | 39.86 by 2nd set, the mean of which is $\frac{1}{4}$ S. C. on south boundary of sec. 31, bears N. 37 lks. dist. This corner is shale sandstone 22x3x26 ins. above ground, marked $\frac{1}{4}$ S C on N. face, as called for in notes of General Land Office, and witnessed by mound of stone 8 lks. northeast of corner. I build mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, around corner to secure its position, mark and witness trees as follows: A pinion, 10 ins. diam., bears N. 61°15' E., 64 lks. dist., marked S C $\frac{1}{4}$ S 31 B T A pinion, 6 ins. diam., bears N. 48°15' W., 32 lks. dist., marked S C $\frac{1}{4}$ S 31 B T (There is an old bearing tree southwest of corner improperly marked, though not called for in notes of General Land Office). Thence from this $\frac{1}{4}$ S. C. I run S. 89°28' E. on true retracement line, along east half of south boundary of sec. 31. |
| 5.50 | Draw, 10 lks. wide, course N. 80° W. |
| 11.50 | Top of ascent 50 ft. above $\frac{1}{4}$ S. C., on ridge bears N. and S. |
| 12.00 | Begin descent, bears N. and S. |
| 28.50 | Base of 200-foot descent at draw, 10 lks. wide, course N. 60° E.; begin ascent. |
| 32.00 | Top of 50-foot ascent, bears N. 80° E. and S. 80° W.; begin descent, bears N. 80° W. and S. 80° E. |
| 39.93 | S. C. of secs. 31 and 32. Thence from $\frac{1}{4}$ S. C. on south boundary sec. 31 I run West on random retracement line along W. half of south boundary of sec. 31, at 40.97 by 1st set of chainmen, 40.90 by 2nd set, the mean of which is 40.94 S. C. of T. 30 S., Rs. 6 and 7 E., bears N. 46 lks. dist. X which is a cross (³⁶ S C 31) on limestone conglomerate rock (instead of quartzite) and witnessed by A pine, 4 ins. diam., which bears N. 7°30' W., 31 lks. dist., instead of N. 10° W. 31 lks. dist., as reported in notes of Gen- eral Land Office. I also mark for witness tree A pinion pine, 10 ins. diam., which bears N. 16°30' E., 65 lks. dist., and mark S C T 30 S R 7 E S 31 B T (There is also an improperly marked juniper tree in the southwest quadrant for B.T., but same is not called for in notes). X Thence from the S. C. above described I run S. 89°21' E. on true retracement line along W. half of south boundary of sec. 31, over rock surface, through scattering timber, gradually ascending. |
| 2.00 | Rocky draw, 5 lks. wide, 15 ft. deep, course S. 30° W. |
| 5.00 | Rocky wash, 5 lks. wide, course S. 30° W. |
| 11.00 | Draw, 5 lks. wide, course S. 30° W. |
| 14.50 | Draw, 5 lks. wide, course S. 30° W. |
| 20.00 | Draw, 10 lks. wide, course S. W.; begin abrupt as- cent, bears N. E. and S. W. |
| 30.00 | Top of ascent, 250 ft. above section corner, bears N. 20° E. and S. 20° W., near south end of rock |

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel South, R. 7 E.

Chains. spur.
 30.30 Begin descent, bears N. E. and S. W.
 32.15 Draw, 10 lks. wide, course S. 70° W., at base of
 50-foot descent; begin ascent, bears N. 70° E.
 and S. 70° W.
 40.94 At the $\frac{1}{4}$ section corner on south boundary sec. 31.
 At this corner I set off 15°50' N. on declination
 arc and at 12^h05^m21^s l.m.t., observe sun on
 meridian and obtain reading of 38°09'30" on
 latitude arc.
 No work in p.m. on account of cloudy weather and
 rain.
 Land, mountainous and broken.
 Soil, rocky limestone, bare rock and sandy, 4th
 rate.
 Timber, pinion-pine and cedar.

August 9, 1904.

SIXTH STANDARD PARALLEL SOUTH, through R.6 E.
 August 10: At S. C. of T. 30 S., Rs. 6 and 7 E.,
 previously described, at 7^h05^m15^s a.m., l.m.t.,
 I set off 38°09'30" on latitude arc and 15°37' on
 declination arc and establish meridian with solar.
 Magnetic declination 16°12' E.

Thence I run

West on random retracement line along south bound-
 ary of sec. 36, through scattering timber over
 nearly bare limestone rock surface.

38.90 by 1st set of chainmen,

38.96 by 2nd set, the mean of which is

38.93 The $\frac{1}{4}$ S. C. on south boundary sec. 36, bears
 N. 46 lks. dist., which is a sandstone (instead
 of quartzite) marked and witnessed as described,
 by

A pine, 6 ins. diam., which bears N. 84° E.,
 20 lks. dist., marked S C $\frac{1}{4}$ S B T

I also mark for a witness tree

A pinion pine, 8 ins. diam., which bears
 N. 54°30' W., 34 lks. dist., marked S C $\frac{1}{4}$ S 36
 B T

Thence from this $\frac{1}{4}$ sec. corner I run

S. 89°20' E. on true retracement line along east
 half of south boundary sec. 36, descending ab-
 ruptly.

2.70 Base 60 ft. descent, bears N. 70° E. and S. 70° W.

3.10 Sulphur Creek (dry) 30 lks. wide, course N. 70° E.;
 road, Teasdale and Boulder, in bed of stream.

4.50 Top of north point of rock, 40 ft. high, between
 Sulphur Wash and Pleasant Creek.

8.50 Same road, bears N. and S.

9.70 Pleasant Creek, 30 lks. wide, stream of fresh water
 10 lks. wide, 12 ins. deep, course N. 30° E. for
 5.00 chs., then more to east; begin ascent up
 bare rocky mountain.

15.40 Top of 200-foot ascent on ridge, bears N. 30° W.
 and S. 30° E.; begin descent.

19.50 Draw, 15 lks. wide, course N. 30° W., base of 120
 ft. descent; begin ascent.

24.70 Draw; 8 lks. wide, course S. W.

32.40 Top of 250-foot abrupt ascent, bears N. and S.

38.88 Set iron U. S. Forest Reserve Boundary Post No. 69

on solid rock and build mound of stone, 6 ft.
 base, 3 $\frac{1}{2}$ ft. high, around same, marked

W C S C on top of cap

T 30 S R 7 E S 31 in N. E. quadrant

T 30 S R 6 E S 36 in N. W. quadrant

RESERVE in S. W. and S. E. quadrants, with 6

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel South, R. 6 E.

| | |
|---------|--|
| Chains. | notches on N., E. and W. sides, for witness corner to corner of T. 30 S., Rs. 6 and 7 E., and for reserve boundary marking. |
| 38.93 | At S. C. of T. 30 S., Rs. 6 and 7 E. |
| | From $\frac{1}{4}$ S. C. on south boundary of sec. 36 I run West on random retracement line along W. half of south boundary of sec. 36, ascending. |
| | 40.14 by 1st set of chainmen |
| 40.16 | 40.18 by 2nd set, the mean of which is S. C. of secs. 35 and 36, bears N. 10 lks. dist., which corner is a trachyte stone 10x8x6 ins. above ground, marked as described and witnessed by |
| | A pine (norway) 18 ins. diam., which bears N. 6° W., 274 lks. (instead of N. 60° W., 274 lks., as reported), properly marked. |
| | Also mark as additional witness tree |
| | A pinion pine, 10 ins. diam., which bears N. 14° E., 254 lks. dist., marked S C T 30 S R. 6 E., S 36 B T |
| | (There is also a B. T. improperly marked S. E. of S. C. and not called for by notes. |
| | Thence from S. C. of secs. 35 and 36 I run S. 89°51' E. on true retracement line along W. half of south boundary sec. 36, over open bottom land. |
| 10.00 | Sulphur Creek (dry) 30 lks. wide, course S. 60° E. |
| 11.50 | Begin ascent and enter scattering timber, bears N. W. and S. 60° E. |
| 16.50 | Rocky wash, 10 lks. wide, course S. 10° W. |
| 21.00 | Top of ascent, 120 ft. above creek on south slope of red ridge; thence along south slope of hill. |
| 25.70 | Rocky wash, 10 lks. wide, course S. |
| 31.80 | Rocky wash, 5 lks. wide, course S. |
| 37.70 | Begin abrupt descent, bears N. 60° E. and S. 60° W. |
| 40.16 | At the $\frac{1}{4}$ S. C. on south boundary sec. 36, which is 100 ft. below last summit. |
| | Land, mountainous and broken. |
| | Soil, rocky and sandy, 4th rate. |
| | Timber, pinion and cedar, with scattering yellow pine along Pleasant Creek and sulphur wash. |
| | Formation, limestone and sandstone, forming in places a natural cement. |
| | No work in p.m. on account of rain. |

August 10, 1904.

August 11: At standard corner of secs. 35 and 36, previously described, at 7h05m15s a.m., l.m.t., I set off 38°09'30" on latitude arc and 15°19'30" N. on declination arc, and establish meridian with solar. Magnetic declination 16°15' E.

Thence I run

West on random retracement line over open bottom land, at

39.35 by 1st set of chainmen

39.29 by 2nd set, the mean of which is

39.32 The $\frac{1}{4}$ S. C. bears N. 40 lks. dist., and is mark on trachyte boulder as called for in notes of General Land Office, and is witnessed by

A pine, which bears S. 86°30' E. instead of N. 89° E., as called for in notes.

This tree being south of line I take the following bearing trees:

A pinion, 6 ins. diam., which bears N. 39° E., 99 lks. dist., marked S. C $\frac{1}{4}$ S 35 B T

A pine, 10 ins. diam., bears N. 2°15' W., 51 lks. dist., marked S C $\frac{1}{4}$ S 35 B T

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., through R. 6 E.

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| Chains. | Thence from the $\frac{1}{2}$ S. C. I run |
| | S. $89^{\circ}25'$ E. on true retracement line along E. half of south boundary of sec. 35, through timber, descending. |
| 4.80 | Draw, 8 lks. wide, course N. 60° E. |
| 10.80 | Draw, 6 lks. wide, course N. 20° E., base of 100-foot descent, bears N. 20° E. and S. 20° W. |
| 14.05 | Draw, 6 lks. wide, course N., begin ascent. |
| 17.30 | Top of 60-foot ascent, bears N. and S. |
| 19.30 | Begin descent, bears NW and S. |
| | Note: Old blazed line runs south of true line and bends at this point back to north. There is no change in needle line, as reported in notes of General Land Office. |
| 24.80 | Draw, 10 lks. wide, course N. 20° E., base of 60-foot descent; begin ascent. |
| 28.30 | Top of 50-foot ascent, bears N. 80° E. and S. W.; begin descent, bears N. 80° W. and S. E. |
| 35.00 | Base of 60-foot descent, bears N. 70° W. and S. 70° E. Enter open bottom land. |
| 39.29 | 3 lks. W. of this corner I set iron U. S. Forest Reserve Boundary Post No. 70, 30 ins. in ground and build mound of stone, 3 ft. base, 1 ft. high, around same for witness corner to S. corner of secs. 35 and 36, marked W C S C on top of cap T 30 S S 36 in N. E. quadrant R 6 E S 35 in N. W. quadrant RESERVE in S. E. and S. W. quadrants on top of cap, with 1 notch on E. and 5 on W. sides. |
| 39.32 | At standard corner of secs. 35 and 36. |
| | From the $\frac{1}{2}$ S.C. on south boundary of sec. 35, previously described I run |
| | West on random retracement line along west half of south boundary of sec. 35, at |
| | 39.92 by 1st set of chainmen |
| | 39.84 by 2nd set, the mean of which is |
| 39.88 | The standard corner of secs. 34 and 35 bears N. 69 lks. dist., which is a sandstone $17 \times 5 \times 30$ ins. above ground, set in mound of stone, marked as described in notes of General Land Office, and is witnessed by A pinion pine, 12 ins. diam., which bears N. $66^{\circ}30'$ E., 17 lks. dist., and is marked S C T 30 S R 6 E S 35 B T, which is not called for in General Land Office notes. |
| | I mark in addition for witness tree: A pinion, 14 ins. diam., which bears N. $62^{\circ}30'$ W. 121 lks. dist., marked S C T 30 S R 6 E S 34 B T |
| | Thence from south corner of secs. 34 and 35 I run |
| | S. $89^{\circ}01'$ E. on true retracement line along south boundary of sec. 35, through timber. |
| 30.00 | Begin abrupt descent bears N. 80° W. and S. E. at north end of ridge. |
| 39.70 | Draw, 5 lks. wide, course N. 60° E., base of 400 foot descent. |
| 39.88 | The $\frac{1}{2}$ S. C. on south boundary sec. 35. Land, mountainous and broken. Soil, sandy and rocky, 4th rate. Timber, small pinion and cedar; some scattering pine along sulphur creek to the N. Too cloudy for noon observation and rain prevents work in p.m. |
| | August 11, 1904. |

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., R. 6 E.

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| Chains. | August 12: At standard corner of secs. 34 and 35 previously described at 7 ^h 05 ^m a.m., l.m.t., I set off 38°09'30" on latitude arc and 15°02' N. on the declination arc and establish a meridian with the solar. Magnetic declination 16°15' E. Thence I run West on random retracement line along south boundary of sec. 34, through scattering timber over broken rocky surface, at 40.09 by 1st set of chainmen 40.04 by 2nd set of chainmen, the mean of which is |
| 40.06 | The $\frac{1}{4}$ S. C. on south boundary of sec. 34 bears N. 40 lks. dist., This $\frac{1}{4}$ S. C. is a sandstone as described by the General Land Office, but being nearly disintegrated I replace same in exact spot by a sandstone 24x14x8 ins., 18 ins. in ground for $\frac{1}{4}$ S.C. marked $\frac{1}{4}$ S C on N. face, from which old bearing tree called for in notes, which is A pinion-pine 14 ins. diam., bears N. 0°45' E. 44 lks. dist., (instead of pine 4 ins. N.2°E. 42 lks. as called for). I mark additional witness tree: A pinion, 6 ins. diam., which bears N. 65°30' W., 60 lks. dist., and mark same S C $\frac{1}{4}$ S 34 B T Thence from $\frac{1}{4}$ S C I run S. 89°26' E. on true retracement line along east half of south boundary sec. 34, ascending north and south over rocky broken surface, through timber. |
| 7.50 | Top of ascent, bears N. and S., 100 ft. above $\frac{1}{4}$ S.C. |
| 11.00 | Draw, 10 lks. wide, 20 ft. rock walls, course S.20° W. |
| 20.00 | Head of small draw, course S. 20° W. |
| 26.80 | Draw, 10 lks. wide, course S. 20° W., heads 3.00 chs. N. |
| 40.01 | Set iron U. S. Forest Reserve Boundary Post No. 71, 1 ft. in ground to solid rock and build mound of stone, 5 ft. base, 2 $\frac{1}{2}$ ft. high; around same for witness corner to S. C. of secs. 34 and 35, marked W C S C on top of cap T 30 S S 35 in N. E. quadrant R 6 E S 34 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 2 notches on E. and 4 on W. faces. |
| 40.06 | At S. C. of secs. 34 and 35. From the $\frac{1}{4}$ S. C. on south boundary of sec. 34 above described I run West on random retracement line along W. half of south boundary sec. 34, at 39.90 by 1st set of chainmen 39.98 by 2nd set of chainmen, the mean of which is |
| 39.94 | The S. C. of secs. 33 and 34 bears N. 53 lks. dist. This corner is a sandstone 12x3x10 ins. above ground, marked as described in notes of General Land Office and witnessed by a Pinion 6 ins. diam., which bears N. 74°15' W., 18 lks. dist., marked S C T 30 S R 6 E S 33 B T, instead of pine 5 ins. diam., N. 85° W., 18 lks., as called for in notes. I also mark an additional witness tree: A pinion, 12 ins. diam., which bears N.68° E., 71 lks. dist., marked S C T 30 S R 6 E S 34 B T |

AQUARIUS FOREST RESERVE BOUNDARY:

Sixth Standard Parallel S., R. 6 E.

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| Chains | <p>3 lks. W. of S. C. of secs. 33 and 34 I set iron U. S. Forest Reserve Boundary Post No. 72, 24 ins. in ground and build mound of stone, $3\frac{1}{2}$ ft. base, $1\frac{1}{3}$ ft. high, around same for W. C. to S. C. of secs. 33 and 34, marked W C S C on top of cap T. 30 S S 34 in N. E. quadrant R 6 E S 33 in N. W. quadrant RESERVE in N. W., S. W. and S. E. quadrants, with 3 notches on E. and W. sides. Thence from the S. C. of secs. 33 and 34 I run S. $89^{\circ}15'$ E. on true retracement line along W. half of south boundary of sec. 34, over broken surface, through timber.</p> <p>19.40 Draw, 10 lks. wide, course S. 30° W. 22.00 Begin descent, bears N. 20° W. and S. 20° E. 26.00 Base of 140-foot abrupt descent, bears N. 20° W. and S. 20° E. 27.00 Dry branch, 20 lks. wide, 8 ft. banks, course S. 20° E. 30.00 Begin ascent, bears N. 20° W. and S. 20° E. 38.40 Draw, 10 lks. wide, course S. 20° W. 39.94 At $\frac{1}{4}$ S. C. on south boundary of sec. 34, 80 feet above branch.</p> |
|--------|--|

At the S. C. of secs. 33 and 34, I set off $14^{\circ}57'$ N. on declination arc and at $12^{\text{h}}04^{\text{m}}54^{\text{s}}$ l.m.t., observe sun on meridian and obtain a reading of $38^{\circ}09'30''$ on latitude arc.

Note: J. J. Elliot and Arthur B. McIntire resume regular duties as moundman and rodman.

GENERAL DESCRIPTION OF T. 31 S., R. 6 E.

Is rough mountainous land, the western portion forming the east slope of Aquarius Plateau. The northern portion is drained by Pleasant Creek, a bold fresh stream about 10 lks. wide and 1 ft. deep, leaving township on north boundary of sec. 2. The central portion is drained by small creek running due east and leaving township on east boundary of sec. 13. The southern portion is drained by Oak Creek, leaving township on east boundary of sec. 25. The last two creeks mentioned have canyon walls, while Pleasant Creek has some bottom lands and benches along slopes that are susceptible of cultivation. Timber is mainly inferior pinion-pine and cedar, some yellow timber suitable for lumber along Pleasant Creek and adjacent benches and in western portion of township.

T. 30 S., R. 6 E.

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| From S. C. of secs. 33 and 34 on Sixth Standard Parallel South, I run N. $0^{\circ}02'$ W. on true line between secs. 33 and 34. Magnetic declination $16^{\circ}00'$., through timber over broken rocky surface. | |
| 5.10 Draw, 10 lks. wide, course S. 80° E. | |
| 10.00 Begin descent, abruptly, bears N. 80° W. and S. 80° E. | |
| 18.00 Base of 150-foot descent at draw, 15 lks. wide, course S. 80° E.; begin abrupt ascent. | |
| 28.00 Top of 200-foot precipitous ascent, bears E. and W. continue gradual ascent. | |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 6 E.

Chains.

- 40.00 Set trachyte boulder 28x14x12 ins., 15 ins. in ground and build mound of stone around same, 3 ft. base, 1 ft. high, for 1/4 sec. corner, marked 1/4 on W. face, from which
 A pinion, 5 ins. diam., bears N. 29°30' E., 60 lks. dist., marked 1/4 S 34 B T
 A pinion, 14 ins. diam., bears N. 80°15' W., 72 lks. dist., marked RES 1/4 S 33 B T
- 46.00 Top of ridge 300 ft. above draw, bears E. and W.
- 46.50 Begin descent, bears E. and W.
- 59.50 Side hill wash, 5 lks. wide, course N. 10° W.
- 62.00 Wash, 5 lks. wide, course N. 20° E.
- 63.85 Brushy draw, 10 lks. wide, 10 foot banks, course N. 80° E. Base of 380 ft. descent, bears N. 80° E. and S. 80° W. Leave timber, thence across open flat.
- 68.00 South Fork of Sulphur Creek, 40 lks. wide, 30 ft. banks (dry), course S. 80° E.
- 72.50 Leave flat, enter timber, and begin ascent, bears N. 80° E. and W.
- 78.00 Top of 80-foot ascent on trachyte ridge, bears N. 80° E. and W.
- 80.00 Set iron U. S. Forest Reserve Boundary Post No. 73, 30 ins. in ground and build mound of stone 4 ft. base, 1 1/2 ft. high around same for corner of secs. 27, 28 33 and 34, marked
 T 30 S S 27 in N. E. quadrant
 R 6 E S 34 in S. E. quadrant
 S 33 in S. W. quadrant
 S 28 in N. W. quadrant
 RESERVE in N. W. and S. W. quadrants, with 3 notches on E. and 1 on south sides, from which
 A pinion, 14 ins. diam., bears N. 24° E., 86 lks. dist., marked T 30 S R 6 E S 27 B T
 A pinion, 10 ins. diam., bears S. 69° E., 57 lks. dist., marked T 30 S R 6 E S 34 B T
 A pinion, 6 ins. diam., bears S. 7° W., 107 lks. dist., marked RES T 30 S R 6 E S 33 B T
 A pinion, 12 ins. diam., bears N. 12°30' W., 60 lks. dist., marked RES T 30 S R 6 E S 28 B T
- Land, mountainous and level.
 Soil, rocky and sandy, 4th and 3rd rate.
 Timber, pinion-pine and cedar.

From corner of secs. 27, 28, 33 and 34, I run N. 0°02' W. on true line between secs. 27 and 28, through thick pinion and cedar timber over level plateau.

- 21.00 Begin descent, bears N. 60° W. and S. 60° E.
- 25.00 Base of 80-foot descent, bears N. 60° W. and S. 60° E.
- 29.65 North Fork of Sulphur Creek, 30 lks. wide, 15 ft. banks, course S. 60° E.; stream of alkali water, in bed of creek, 2 lks. wide, 1 in. deep.
- 31.00 Begin ascent, bears N. 60° W. and S. 60° E.
- 35.00 Draw, 5 lks. wide, course S. 30° W.
- 36.80 Draw, 5 lks. wide, course S. 30° W.
- 40.00 Set sandstone 22x8x6 ins., 18 ins. in ground for 1/4 sec. corner, marked 1/4 on W. face, from which
 A pinion, 10 ins. diam., bears S. 63°45' E., 29 lks. dist., marked 1/4 S 27 B T
 A pinion, 10 ins. diam., bears S. 84°45' W., 42 lks. dist., marked RES 1/4 S 28 B T

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 6 E.

| | |
|---------|---|
| Chains. | |
| 42.50 | Draw, 10 lks. wide, course S. 30° W. |
| 57.60 | Draw, 15 lks. wide, course S. 10° W. |
| 68.00 | Draw, 10 lks. wide, course S. W. (40 ft. deep). |
| 76.00 | Top of 550 ft. ascent, bears N. 70° W. and S. 70° E. Thence continue gradual ascent over rolling plateau. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 74, 6 ins. in ground to solid rock and build mound of stone, 6 ft. base, 3 ft. high, around same for corner of secs. 21, 22, 27 and 28, marked T 30 S S 22 in N. E. quadrant R 6 E S 27 in S. E. quadrant S 28 in S. W. quadrant S 21 in N. W. quadrant RESERVE in N. W. and S. W. quadrants on top of cap, with 3 notches on E. and 2 on S. sides, from which A pinion, 6 ins. diam., bears N. 11° E., 56 lks. dist., marked T 30 S R 6 E S 22 B T A pinion, 10 ins. diam., bears S. 87°15' E., 52 lks. dist., marked T 30 S R 6 E S 27 B T A pinion, 12 ins. diam., bears S. 70° W., 12 lks. dist., marked RES T 30 S R 6 E S 28 B T A pinion, 10 ins. diam., bears N. 55°15' W., 31 lks. dist., marked RES T 30 S R 6 E S 21 B T Land, mountainous and rolling. Soil, sandy and rocky, 4th rate. Timber, small pinion-pine and cedar. Formation changes to limestone in north half. August 12, 1904. |
| | August 13: |
| | At corner of secs. 21, 22, 27 and 28, at 7 ^h 04 ^m 45 ^s a.m., l.m.t., I set off 38°11' on latitude arc and 14°43'30" N. on the declination arc and establish meridian with solar; magnetic declination 16°06', and run N. 0°02' W. on true line, between secs. 21 and 22, through timber, ascending. |
| 12.00 | Wash, 5 lks. wide, course S. 80° W. |
| 15.00 | Top of 100-foot ascent on W. end of ridge, thence over rolling surface which drains to S. W. |
| 21.50 | Draw, 5 lks. wide, course W. |
| 38.00 | Begin descent, bears E. and W. |
| 40.00 | Set limestone 26x14x10 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on W. face, from which A pinion, 5 ins. diam., bears N. 28° E., 24 lks. dist., marked 1/4 S 22 B T A pinion, 10 ins. diam., bears N. 65°30' W., 16 lks. dist., marked RES 1/4 S 21 B T |
| 45.00 | Base of 100-foot descent, at open hollow draw, which drains to N. 70° E. |
| 47.00 | Begin ascent, bears N. E. and S. 70° W. |
| 67.00 | Top of 200-foot ascent, bears N. 20° E. and S. 20° W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 75, 1 ft. in ground to solid rock and build mound of stone, 6 ft. base, 3 ft. high, around same, for corner of secs. 15, 16, 21 and 22, marked T 30 S S 15 in N. E. quadrant R 6 E S 22 in S. E. quadrant S 21 in S. W. quadrant S 16 in N. W. quadrant RESERVE in S. W. quadrant, with 3 notches on E. and S. sides, from which |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 6 E.

Chains.

A pinion, 6 ins. diam., bears N. 53° E., 29
lks. dist., marked T 30 S R 6 E S 15 B T
A pinion, 8 ins. diam., bears S. 22°30' E., 17
lks. dist., marked T 30 S R 6 E S 22 B T
A pinion, 14 ins. diam., bears S. 39° W., 53
lks. dist., marked RES T 30 S R 6 E S 21
B T
A pinion, 16 ins. diam., bears N. 17°30' W.,
78 lks. dist., marked T 30 S R 6 E S 16
B T

Land, mountainous and rolling.

Soil, rocky, sandy and limestone, 4th rate.

Timber, pinion-pine and cedar.

Formation, sandstone top hills, with limestone
sub-strata.

10.50

From corner of secs. 15, 16, 21 and 22, I run
West on true line between secs. 16 and 21, over
rolling land, through thick timber, (small).

Juniper post, bears N. 20 lks. dist., marked
"Center East, Treadwell Lode No. 7" of M. E.
Smith and W. F. Mitchell's mineral claim.

28.25

Flat draw, 15 lks. wide, course S. 30° E.

40.00

Set sandstone 26x16x8 ins., 18 ins. in ground
for 1/4 sec. corner marked 1/4 on N. face, from
which

A pinion, 14 ins. diam., bears N. 36°30' E.,
47 lks. dist., marked 1/4 S 16 B T

A pinion, 20 ins. diam., bears S. 43°30' E.,
46 lks. dist., marked RES 1/4 S 21 B T

57.50

Flat draw, 10 lks. wide, course S. 30° E.

75.60

Head of draw, 5 lks. wide, course S.

80.00

Set iron U. S. Forest Reserve Boundary Post No. 76,
18 ins. in ground to solid rock and build mound
of stone, 5 ft. base, 2 1/2 ft. high around same,
for corner of secs. 16, 17, 20 and 21, marked

T 30 S S 16 in N. E. quadrant

R 6 E S 21 in S. E. quadrant

S 20 in S. W. quadrant

S 17 in N. W. quadrant

RESERVE in S. E. and S. W. quadrants, with 4
notches on E. and 3 on S. sides, from which

A pinion, 10 ins. diam., bears N. 26°45' E.,
47 lks. dist., marked T 30 S R 6 E S 16
B T

A pinion, 16 ins. diam., bears S. 57°30' E.,
19 lks. dist., marked RES T 30 S R 6 E
S 21 B T

A pinion, 14 ins. diam., bears
S. 34° W., 65 lks. dist., marked RES T 30 S
R 6 E S 20 B T

A pinion, 10 ins. diam., bears N. 35°30' W., 98
lks. dist., marked T 30 S R 6 E S 17 B T

Land, level and rolling.

Soil, sandy and rocky, limestone, 4th rate.

Timber, thick small pinion-pine and cedar, and
scattering yellow pine.

At the 1/4 sec. corner between secs. 16 and 21,
I set off 14°38'30" N. on declination arc, and at
12h04m44s, l.m.t., observe sun on the meridian
and obtain a reading of 38°12' on the latitude
arc.

From corner of secs. 16, 17, 20 and 21, I run
West on true line between secs. 17 and 20, over
rolling tableland, through timber.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 6 E.

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| Chains. | |
| 7.50 | Draw, 10 lks. wide, course S. 20° E. |
| 10.80 | Post bears N. 50 lks. dist., marked "Westerly end center stake of the Anna No. 2 Lode". 6 ins. east of this post is post marked "Easterly end center stake of the Heckley No. 2 Lode", each noted running N. and S. 300 ft. dist. |
| 16.05 | Draw 5 lks. wide, course S. 20° W. |
| 21.00 | Draw, 10 lks. wide, course S. 20° W. |
| 40.00 | Set sandstone 26x10x8 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, from which |
| | A black pine, 12 ins. diam., bears N. 29°30' W. 46 lks. dist., marked 1/4 S 17 B T |
| | A pinion, 14 ins. diam., bears S. 46°30' E., 48 lks. dist., marked RES 1/4 S 20 B T |
| | August 13, 1904 |
| | August 15: |
| 51.00 | Begin descent, bears N. W. and S. 80° E. |
| 59.50 | Draw, 10 lks. wide, course S. 30° W., at base of 200-foot descent; begin ascent, bears N. 30° E. and S. 30° W. |
| 67.00 | Top of 100-foot ascent, on S. slope of spur; thence along south slope of mountain over broken ground. |
| 74.90 | Draw, 10 lks. wide, course S. Leave limestone, enter sandstone formation. |
| 80.00 | True point for corner of secs. 17, 18, 19 and 20 falls on draw, 10 lks. wide, course S. |
| 80.36 | Set iron U. S. Forest Reserve Boundary Post No. 77, 12 ins. in ground to solid rock and build mound of stone, 5 ft. base, 3 ft. high, around same for witness corner to corner of secs. 17, 18, 19 and 20, marked |
| | W C on top of cap, |
| | T 30 S S 17 in N. E. quadrant |
| | R 6 E S 20 in S. E. quadrant, |
| | S 19 in S. W. quadrant, |
| | S 18 in N. W. quadrant, |
| | RESERVE in S. E. and S. W. quadrants, with 5 notches on E. and 3 on S. sides, from which |
| | A pinion, 10 ins. diam., bears N. 30°30' E., 75 lks. dist., marked W C T 30 S R 6 E S 17 B T |
| | A cedar, 8 ins. diam., bears S. 62°E., 71 lks. dist., marked RES W C T 30 S R 6 E S 20 B T |
| | A pinion, 20 ins. diam., bears S. 25° W., 24 lks. dist., marked RES W C T 30 S R 6 E S 19 B T |
| | A pinion, 12 ins. diam., bears N. 49° W., 59 lks. dist., marked W C T 30 S R 6 E S 18 B T |
| | Land, rolling and broken. |
| | Soil, rocky limestone and sandstone, 4th rate. |
| | Timber, thick pinion and cedar. |
| | From true point for corner of secs. 17, 18, 19 and 20, which is 36 lks. east of W C, I run West on true line between secs. 18 and 19, through timber, over broken surface, along south slope of divide, between sulphur creek on the south and Carcas Creek on the north. |
| 11.00 | Draw, 15 lks. wide, course S. |
| 18.30 | Draw, 15 lks. wide, course S. 20° E. |
| 32.30 | Draw, 10 lks. wide, course S. E. |
| 40.00 | Set trachyte boulder 30x22x14 ins. 22 ins. in the ground, for 1/4 sec. corner, marked 1/4 on N. face, from which |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 6 E.

Chains.

A pinion, 10 ins. diam., bears N. 34°15' W.,
41 lks. dist., marked 1/4 S 18 B T

A pinion, 8 ins. diam., bears S. 60° W., 38
lks. dist., marked RES 1/4 S 19 B T

No work in p.m. on account of cloudy weather.

August 15, 1904.

August 16: At 7^h04^m11^s a.m., l.m.t., I set off
38°12' on latitude arc and 13°47'45" N. on de-
clination arc and continue west on true line.

46.85

Draw, 5 lks. wide, course S. 60° E. Head of Sul-
phur creek heads 1 ch. N. on divide.

49.15

Road, "Teasdale and Boulder", bears N. W. and S. E.

60.60

Projecting red sandstone ledge, 30 ft. high, bears
N. 30° W. and S. 30° E.

65.35

Draw, 15 lks. wide, course S. 30° E., into Sul-
phur Creek, heads 4 chs. N. on divide.

75.37

Intersect W. boundary of township 2.93 chs. south of
corner of secs. 13, 18, 19 and 24, and
Set iron U. S. Forest Reserve Boundary Post No. 78,
30 ins. in ground and raise mound of stone, 3 1/2
ft. base, 1 ft. high, around same for C.C. of
secs. 18 and 19, marked

C C on E. side of center on top of cap

T 30 S S 18 in N. E. quadrant

R 6 E S 19 in S. E. quadrant

RESERVE in S. E., S. W. and N. W. quadrants
on top of cap, with 3 notches on N. and S.
sides, from which

A pinion, 6 ins. diam., bears N. 68°30' E., 8
lks. dist., marked C C T 30 S R 6 E S 18
B T

A pinion, 6 ins. diam., bears S. 35° E., 18
lks. dist., marked RES CC T 30 S R 6 E
S 19 B T

Land, mountainous and rolling.

Soil, rocky and sandy, 4th rate.

Timber, thick pinion and juniper.

GENERAL DESCRIPTION T. 30 S., R. 6 E.

This township is rough, broken and rolling mountain
land, some narrow flats and benches along Sulphur
creek and in the southwest 1/4 suitable for ag-
riculture if water could be obtained for irrigat-
ing. There is a cabin and abandoned ranch in
sec. 35 on Sulphur creek. Timber principally small
pinion-pine and cedar, with some scattering yellow
pine suitable for lumber in S. W. 1/4 and along
Sulphur creek. Southwest 1/4 of township is of
sandstone formation. There is a strata of lime-
stone and flint running N. W. and S. E. diagonally
across township from N. W. corner to S. E. corner
and contains copper stain; some copper has been
mined near center and northwest portion of town-
ship, though claims are not being worked at pres-
ent. Sulphur Creek traverses secs. 34, 35 and
36, emptying into Pleasant creek in sec. 36. Forks
in sec. 34, one fork (dry) coming from N. 80° W. and
one from N. W. The north fork has very little
water, heading in secs. 18 and 19. Pleasant creek,
a bold stream of fresh water, traverses the S. E.
1/4 of sec. 36 and passes through box canyon of
limestone 10.00 chs. north of Sixth Standard Par-
allel South, forming good reservoir site.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | <p>In order to establish the south boundary of secs. 13 and 14, T. 30 S., R. 5 E., I proceed as follows:</p> <p>From notes of General Land Office the north boundary of sec. 13 bears N. 29°39' E., 19.23 chs. dist., making sec. 12 and north boundary of sec. 13 a very small fraction, and in order to maintain uniformity as much as possible and therefore throw fraction on south boundary of sec. 13.</p> <p>From corner of secs. 13, 18, 19 and 24, T. 30 S., Rs. 5 and 6 E., which is trachyte boulder 12x12x10 ins. above ground, marked and witnessed as described by Surveyor General of Utah. At this corner I set off 38°12' on latitude arc and 13°45'15" N. on the declination arc, and at 9 a.m., l.m.t., establish meridian with solar and run</p> <p>West on random line, setting and marking stakes at intervals of 10.00 chs. for future reference until I reach a point about south of the corner of secs. 10, 11, 14 and 15.</p> <p>Being unable to find the 1/4 sec. corner between secs. 14 and 15, I proceed to corner of secs. 10, 11, 14 and 15, which is trachyte 8x6x8 ins. above ground, firmly set and marked as described by the General Land Office.</p> <p>Thence I run</p> <p>S. 0°01' E. on true line between secs. 14 and 15, through timber over rolling surface.</p> <p>5.00 Begin descent, bears N. 30° E. and S. 30° W.</p> <p>10.60 Draw, 10 lks. wide, course N. 30° E., base of 40-foot descent.</p> <p>14.50 Elbow of same draw, course N. 20° W. from S. 20° W.</p> <p>27.60 Draw, 5 lks. wide, course N. 80° E.</p> <p>30.00 Begin ascent, bears N. E. and S. W.</p> <p>34.00 Top of 40-foot ascent, bears N. E. and S. W.</p> <p>40.00 After diligent search no trace of corner being found and as no axe mark can be found on entire half-mile, which is through dense pinion cedar timber, and as no notes were taken on original survey, the evidence is conclusive that the line has never been run as reported. I therefore set trachyte 24x8x6 ins., 10 ins. in the ground to solid rock and build mound of stone, 3 ft. base, 1 ft. high, around same for 1/4 sec. corner, marked 1/4 on W. face, from which</p> <p style="padding-left: 40px;">A pinion, 10 ins. diam., bears N. 40°45' E., 27 lks. dist., marked 1/4 S 14 B T</p> <p style="padding-left: 40px;">A cedar, 20 ins. diam., bears S. 50° W., 39 lks. dist., marked RES 1/4 S 15 B T</p> <p style="text-align: right;">August 16, 1904.</p> <p>August 17:</p> <p>45.25 Draw, 15 lks. wide, course N. E. begin ascent over bare rock surface.</p> <p>62.00 Intersect E. and W. line 90.12 chs. west of corner of secs. 13, 18, 19 and 24. The intersection or true point for corner of secs. 14, 15, 22 and 23, falls on unsafe ground in draw, 10 lks. wide, course N. W., 20 lks. N. of this point at</p> <p>61.80 Set iron U. S. Forest Reserve Boundary Post No. 80 18 ins. in ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same for witness corner to corner of secs. 14, 15, 22 and 23, marked</p> <p style="padding-left: 20px;">W C on top of cap</p> <p style="padding-left: 20px;">T 30 S S 14 in N. E. quadrant</p> <p style="padding-left: 20px;">R 5 E S 23 in S. E. quadrant</p> <p style="padding-left: 20px;">S 22 in S. W. quadrant</p> <p style="padding-left: 20px;">S 15 in N. W. quadrant</p> <p style="padding-left: 20px;">RESERVE in N. W. and S. W. and S. E. quadrants,</p> |
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AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | <p>with 2 notches on E. and 3 on S. sides, from which</p> <p>A pinion, 10 ins. diam., bears N. 45°45' E., 63 lks. dist., marked W C T 30 S R 5 E S 14 B T</p> <p>A pinion, 12 ins. diam., bears S. 40°15' E., 27 lks. dist., marked RES W C T 30 S R 5 E S 23 B T</p> <p>A pinion, 12 ins. diam., bears S. 25°15' W., 45 lks. dist., marked RES W C T 30 S R 5 E S 22 B T</p> <p>A pinion, 14 ins. diam., bears N. 34° W., 61 lks. dist., marked RES W C T 30 S R 5 E S 15 B T</p> |
| 62.00 | <p>True point for corner of secs. 14, 15, 22 and 23. Land, rolling and mountainous. Soil, rocky and sandy, 4th rate. Timber, small pinion-pine and cedar.</p> |
| | <p>From true point for corner of secs. 14, 15, 22 and 23, which is 20 lks. south of witness corner I run (see random previously run) East on true line between secs. 14 and 23, through timbered mountain land, ascending, bears N. E. and S. W.</p> |
| 10.00 | Draw, 5 lks. wide, course N. W. |
| 12.50 | West wall of narrow canyon, 150 ft. deep, course N. 20° W., heads 1 ch. south of line. |
| 16.60 | Top of east wall of canyon. |
| 22.50 | Top of abrupt ascent, 350 ft. above sec. corner; continue gradual ascent, bears N. 80° E. and S. 30° W. |
| 35.00 | Top of gradual ascent, bears N. 30° E. and S. 70° W., 400 ft. above sec. corner; thence over rolling bench, through yellow pine timber. |
| 40.00 | Set trachyte boulder 22x16x8 ins., 15 ins. in ground for 1/4 sec. corner, marked 1/4 on N. face, from which |
| | <p>A yellow pine, 24 ins. diam., bears N. 68° W., 42 lks. dist., marked 1/4 S 14 B T</p> <p>A yellow pine, 18 ins. diam., bears S. 6° W., 29 lks. dist., marked RES 1/4 S 23 B T</p> |
| 42.50 | Begin descent, bears N. 10° E. and S. |
| 48.00 | Base of 50-foot descent, at draw 10 lks. wide, course N. 30° E.; begin ascent. |
| 53.50 | Top of 40-foot ascent, bears N. 30° E. and S. 30° W.; leave yellow pine timber, continue in small tim- ber. |
| 56.00 | Begin descent, bears N. 20° E. and S. 40° W. |
| 80.00 | Set trachyte boulder 22x16x8 ins., 18 ins. in the ground for corner of secs. 13, 14, 23 and 24, marked with 1 notch on E. and 3 on S. sides, from which |
| | <p>A pinion, 10 ins. diam., bears N. 36°30' E., 26 lks. dist., marked T 30 S R 5 E S 13 B T</p> <p>A pinion, 16 ins. diam., bears S. 12°15' E., 38 lks. dist., marked RES T 30 S R 5 E S 24 B T</p> <p>A pinion, 10 ins. diam., bears S. 67° W., 45 lks. dist., marked RES T 30 S R 5 E S 23 B T</p> <p>A pinion, 8 ins. diam., bears N. 56° W., 65 lks. dist., marked T 30 S R 5 E S 14 B T</p> |
| | <p>Corner falls at base of 500 foot descent, bearing N. 20° W. and S. 20° W. Land, mountainous and rolling. Soil, rocky, gravelly, 4th rate. Timber, pinion-pine and cedar; yellow pine suitable for timber on last half and to south of line.</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | From corner of secs. 13, 14, 23 and 24, T. 30 S., R. 5 E., I run |
| o.20 | East on true line between secs. 13 and 24, over rolling surface, through small timber. |
| 6.10 | Draw, 10 lks. wide, course S. 30° E., heads on divide 5.00 chs. N. |
| 10.08 | Draw, 15 lks. wide, course N. 70° E. |
| 10.12 | Intersect boundarypost No. 79 described below. |
| | Corner of secs. 13, 18, 19 and 24, which is trachyte stone 12x12x10 ins. above ground marked and witnessed as described by Surveyor General of Utah. |
| | As closing corner is set for corner of secs. 18 and 19 on line from east, between secs. 18 and 19, I cut out markings on N. E. and S. E. bearing trees at this corner making same corner common to 2 secs., and at 4 lks. west of corner |
| | Set iron U. S. Forest Reserve Boundary Post No. 79 18 ins. in ground to solid rock, and build mound of stone, 4 ft. base, 2 ft. high, around same for witness corner to corner of secs. 13 and 24, marked |
| | W C on top of cap |
| | R 5 E S 13 in N. W. quadrant |
| | T 30 S S 24 in S. W. quadrant |
| | RESERVE in S. W. quadrant, with 3 notches on N. and S. sides. |
| | As the northwest bearing tree of this corner is dead I take in addition thereto |
| | A pinion, 12 ins. diam., which bears N. 45°45' W. from true corner, 14 lks. dist., and mark same |
| | T 30 S R 5 E S 13 B T |
| | Land, rolling. |
| | Soil, rocky and sandy. |
| | Timber, pinion-pine and cedar. |

From corner of secs. 10, 11, 14 and 15, which is a trachyte 8x6x8 ins. above ground, firmly set and marked as called for in notes of General Land Office. This corner having no bearing trees, I note and mark the following:

A pinion, 10 ins. diam., which bears N. 71° E., 44 lks. dist., marked T 30 S R 5 E S 11 B T

A pinion, 10 ins. diam., which bears S. 29° E., 71 lks. dist., marked T 30 S R 5 E S 14 B T

A pinion, 8 ins. diam., which bears S. 38° W., 44 lks. dist., marked RES T 30 S R 5 E S 15 B T

A pinion, 12 ins. diam., bears N. 4°30' W., 54 lks. dist., marked T 30 S R 5 E S 10 B T

Thence I run

West on random retracement line, between secs. 10 and 15, through timber over rolling surface.

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| 39.86 | Intersect N. and S. 1/4 sec. line 76 lks. south of 1/4 sec. corner, which is a trachyte stone 16x8x12 ins. above ground, marked 1/4 on N. face and from which |
| | A pinion, 12 ins. diam., bears S. 15° E., 23 lks. dist. Old markings being on a limb of this tree, I mark on trunk near ground |
| | RES 1/4 S 15 B T |
| | A juniper, 10 ins. diam., bears N. 49° W., 12 lks. dist., contains old marking 1/4 S B T |
| | Thence from the 1/4 corner above described I run |
| | S. 88°54' E. on true retracement line between east halves of secs. 10 and 15, through timber, descending. |
| 5.00 | Base of 80-foot descent, bears N. 20° E. and S. 20° W. Leave timber, enter open flat, same bearing. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

| Chains. | |
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| 12.00 | Irrigating ditch, 10 lks. wide, water 6 ins. deep, course N. |
| 12.80 | Road, bears N. and S. |
| 16.30 | "Carcas" Creek, 10 lks. wide, 6 ins. deep, fresh water, course N. |
| 18.80 | Road, bears N. and S. |
| 20.10 | Leave open flat, enter timber and begin ascent, bears N. 20° W. and S. |
| 23.30 | Top of 60-foot ascent, bears N. and S., begin descent. |
| 29.30 | Draw, 10 lks. wide, course N. 20° E., at base of 60-foot descent, begin ascent. |
| 35.30 | Top of 40-foot ascent, bears N. 20° E. and S. 20° W. |
| 39.23 | Set iron U. S. Forest Reserve Boundary post No. 81, 24 ins. in ground, and build mound of stone, 3 ft. base, 1 1/2 ft. high, around same for witness corner to corner of secs. 10, 11, 14 and 15, marked W C on top of cap T 30 S S 11 in N. E. quadrant R 5 E S 14 in S. E. quadrant S 15 in S. W. quadrant S 10 in N. W. quadrant RESERVE in S. W. quadrant on top of cap, with 2 notches on E. and 4 on S. sides. |
| 39.26 | Intersect corner of secs. 10, 11, 14 and 15. Thence from 1/4 sec. corner between secs. 10 and 15 I run West on random retracement line between west halves of secs. 10 and 15. |
| 40.07 | Intersect N. and S. section line 20 lks. S. of corner of secs. 9, 10, 15 and 16, which is a trachyte stone 18x12x10 ins. above ground, with mound of stone, 3 ft. base, 2 ft. high, S. of corner, from which old bearing tree a A pinion, 14 ins. diam., bears N. 11° E., 45 lks. dist., marked T 30 S R 5 E S 10 B T This tree not called for in notes. I take as additional witness trees: A pinion, 12 ins. diam., which bears S. 76°15' E. 121 lks. dist., marked RES T 30 S R 5 E S 15 B T A cedar, 10 ins. diam., bears S. 22°30' W., 58 lks. dist., marked RES T 30 S R 5 E S 16 BT A cedar, 5 ins. diam., bears N. 24°45' W., 40 lks. dist., marked RES T 30 S R 5 E S 9 B T Three lks. W. of this corner I set iron U. S. Forest Reserve Boundary Post No. 82, 30 ins. in ground and build mound of stone, 3 1/2 ft. base, 1 1/2 ft. high, around same for witness corner to corner of secs. 9, 10, 15 and 16, marked W C on top of cap T 30 S S 10 in N. E. quadrant R 5 E S 15 in S. E. quadrant S 16 in S. W. quadrant S 9 in N. W. quadrant RESERVE in N. W., S. W. and S. E. quadrants, with 3 notches on E. and 4 on south faces. Thence from corner above described I run South 89°43' E. on true retracement line between west halves of secs. 10 and 15, through scattering timber over rolling surface. |
| 18.70 | Draw, 10 lks. wide, course N. E. |
| 39.00 | Begin descent, bears N. and S. |
| 40.07 | Intersect 1/4 sec. corner between secs. 10 and 15, which is 40 ft. below summit. Land, hilly and rolling. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | Soil, rocky and sandy, 4th rate. Timber, small pinion and cedar. | August 17, 1904. |
| | August 18: At the corner of secs. 9, 10, 15 and 16, at 7 ^h 03 ^m 45 ^s a.m., l.m.t., I set off 38°13' on latitude arc and 15°09'30" N. on the declination arc and es- tablish a meridian with the solar. Thence I run N. 0°02' W. on random retracement line between secs. 9 and 10, through timber. | |
| 40.53 | Intersect E. and W. 1/4 sec. line 64 lks. W. of 1/4 sec. corner between secs. 9 and 10, which is a trachyte 12x8x10 ins. above ground, marked and wit- nessed as described in notes of General Land Of- fice. As the southwest bearing tree is dead, I take in addition thereto: A cedar, 8 ins. diam., which bears S. 89° W., 33 lks. dist., marked RES 1/4 S 9 E T Thence from the 1/4 sec. corner I run S. 0°53' W. on true retracement line between south halves of secs. 9 and 10, from 1/4 corner in N. edge of timber, bearing E. and W. | |
| 9.00 | Open hollow swail, course E. | |
| 17.00 | Wash, 3 lks. wide, course N. 20° E. | |
| 21.25 | Same wash, course N. W. | |
| 24.00 | Begin ascent, bears N. 80° E. and S. 80° W. | |
| 31.00 | Top of 60-foot ascent, bears E. and W. | |
| 35.50 | Begin descent, bears E. and W. | |
| 38.00 | Base of 30-foot descent, bears E. and W. | |
| 40.35 | Draw, 5 lks. wide, course E. | |
| 40.53 | At corner of secs. 9, 10, 15 and 16. | |
| | Thence from the 1/4 sec. corner between secs. 9 and 10 I run N. 0°02' W. on random retracement line between secs. 9 and 10 over open bench. | |
| 38.47 | Intersect E. and W. sec. line 68 lks. W. of corner to secs. 3, 4, 9 and 10, which is a trachyte stone 15x10x4 ins. above ground correctly marked, as described by the General Land Office. I take as witness trees to this corner A cedar, 12 ins. diam., which bears N. 19°30' E., 40 lks. dist., marked T 30 S R 5 E S 3 B T A pinion, 10 ins. diam., bears N. 52°15' W., 81 lks. dist., marked T. 30 S. R 5 E S 4 B T No other trees available. Thence from the corner of secs. 3, 4, 9 and 10, I run S. 0°58' W. on true retracement line between north halves of secs. 9 and 10, through scattering timber. | |
| .03 | I set iron U. S. Forest Reserve Boundary Post No. 83, 30 ins. in ground, for W. C. to corner of secs. 3, 4, 9 and 10, marked W C on top of cap T 30 S S 3 in N. E. quadrant R 5 E S 10 in S. E. quadrant S 9 in S. W. quadrant S 4 in N. W. quadrant RESERVE in S. W. quadrant on top of cap, with 3 notches on E. and 5 on S. sides. | |
| 2.30 | Leave scattering timber, enter open flat, bears N. 70° E. and S. 70° W., flat drains to E. | |
| 6.50 | Leave open flat, enter timber, bears E. and W. | |
| 30.00 | Leave timber, enter open bench, bears E. and W. | |
| 38.47 | Intersect the 1/4 sec. corner between secs. 9 and 10. Land, rolling and level | |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | Soil, rocky and gravelly, 3rd and 4th rate. Timber, pinion-pine and cedar. |
| | No noon observation on account of cloudy weather. |
| | From corner of secs. 3, 4, 9 and 10 previously described I run West on random retracement line between secs. 4 and 9. |
| 40.00 | No trace of 1/4 sec. corner found. I set temporary stake for same and continue west. |
| 77.09 | Intersect N. and S. sec. line 8 lks. south of corner of secs. 4, 5, 8 and 9, which is a trachyte 16x5x12 ins. above ground correctly marked. There are no witness trees as called for in the General Land Office notes, and I note and mark the following: A pinion, 5 ins. diam., which bears N. 9° E., 46 lks. dist., marked T 30 S R 5 E S 4 B T A pinion, 10 ins. diam., bears S. 45°30' E., 71 lks. dist., marked RES T 30 S R 5 E S 9 B T A pinion, 6 ins. diam., bears S. 43°30' W., 69 lks. dist., marked RES T 30 S R 5 E S 8 B T A pinion, 12 ins. diam., bears N. 82°30' W., 24 lks. dist., marked T 30 S R 5 E S 5 B T Five lks. west of this corner I set iron U. S. Forest Reserve Boundary Post No. 84, 30 ins. in ground and build mound of stone, 3 ft. base, 1 1/2 ft. high around same for W. C. to corner of secs. 4, 5, 8 and 9, marked W C on top of cap T 30 S S 4 in N. E. quadrant R 5 E S 9 in S. E. quadrant S 8 in S. W. quadrant S 5 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 4 notches on E. and 5 on S. sides. Thence from the true corner of secs. 4, 5, 8 and 9 I run S. 89°57' E. on true retracement line between secs. 4 and 9, through timber ascending. |
| 4.00 | Top of 40-foot ascent, bears N. W. and S. E. |
| 7.00 | Begin descent, bears N. W. and S. E. |
| 12.00 | Base of 40-foot descent, bears N. W. and S. E. |
| 21.50 | Draw, 5 lks. wide, course N. 20° E. |
| 28.70 | Draw, 5 lks. wide, course N. 20° E. |
| 38.54 1/2 | Set trachyte stone 22x8x4 ins. 15 ins. in ground for 1/4 sec. corner, marked 1/4 on N. face, from which A pinion, 8 ins. diam., bears N. 28°30' E., 45 lks. dist., marked 1/4 S 4 B T A pinion, 12 ins. diam., bears S. 27° E., 23 lks. dist., marked RES 1/4 S 9 B T |
| 43.00 | Road, bears N. and S. |
| 49.50 | Begin descent, bears N. E. and S. W. |
| 56.00 | Base of 100-foot descent, leave timber, enter open flat, bears N. and S. Flat drains to N. E. |
| 65.90 | Leave flat, enter timber and begin ascent, bears N. 70° E. and S. 70° W. |
| 70.00 | Top of 30-foot ascent, bears N. 70° E. and S. 70° W. on trachyte ridge; begin descent, same bearing. |
| 77.09 | At corner of secs. 3, 4, 9 and 10, on S. E. slope of ridge, 80 ft. below summit. Land, rolling and hilly. Soil, rocky and gravelly, 4th rate. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | <p>Timber, pinion-pine and cedar.</p> <p>Local attraction of the magnetic needle on this mile.</p> <p>Note: This line has never been run as reported. No axe sign whatever through dense timber and notes show no acquaintance with country.</p> <p style="text-align: right;">August 18, 1904.</p> |
| 29.24 | <p>August 19: At the corner of secs. 4, 5, 8 and 9 previously described, at 7^h03^m30^s a.m., l.m.t., I set off 38°14' on the latitude arc and 12°50' N. on the declination arc and run West on random retracement line, through timber, descending.</p> <p>Intersect N. and S. 1/4 sec. line 53 lks. S. of the 1/4 corner between secs. 5 and 8, which is a trachyte 10x4x8 ins. above ground, marked 1/4 on N. face, as described by the General Land Office and witnessed by a</p> <p style="padding-left: 40px;">Pine, 6 ins. diam., which bears N. 17°15' W., 46 lks. dist., marked 1/4 S B T, instead of</p> <p style="padding-left: 40px;">Pine, 6 ins. diam., N. 15° W., 46 lks. dist., as reported by the General Land Office.</p> <p>I take as an additional bearing tree a</p> <p style="padding-left: 40px;">Pinion, 10 ins. diam., which bears S. 58°45' W., 38 lks. dist., marked RES 1/4 S 8 B.T.</p> <p style="padding-left: 40px;">This B. T. taken instead of old bearing tree called for in notes, which is dead and fallen though old markings are still readable.</p> <p>Thence from the 1/4 sec. corner between secs. 5 and 8 I run</p> <p style="padding-left: 40px;">S. 88°59' E. on true retracement line through timber.</p> |
| 1.20 | Begin descent, bears N. and S. |
| 4.00 | Base of 50-foot descent at Fish Creek, a stream of fresh water, 8 lks. wide, 10 ins. deep, course N. |
| 4.30 | Old road, begin ascent, bears N. and S. |
| 7.70 | Top of 50-foot ascent, bears N. and S. |
| 12.70 | Draw, 10 lks. wide, course N. |
| 18.00 | Begin descent, bears N. and S. |
| 25.05 | Old road, bears N. 20° W. and S. 20° E. |
| 27.80 | Draw, 10 lks. wide, course N. 20° W., at base of 20-foot descent; begin ascent, bears N. 20° W. and S. 20° E. |
| 29.24 | Intersect corner of secs. 4, 5, 8 and 9. |
| 39.13 | <p>Thence from the 1/4 sec. corner between secs. 5 and 8 I run</p> <p>West on random retracement line between west halves of secs. 5 and 8.</p> <p>Intersect N. and S. sec. line 142 lks. N. of corner of secs. 5, 6, 7 and 8, which is a cross (X^{inf}) on sandstone ledge, as described in notes of General Land Office, from which</p> <p style="padding-left: 40px;">A yellow pine, 22 ins. diam., bears N. 81°30' E., 31 lks. dist., marked T 30 S R 5 E S 5 B T.</p> <p style="padding-left: 40px;">This tree was marked with pencil for old B.T., though not called for in notes.</p> <p style="padding-left: 40px;">No other trees available.</p> |
| .80 | Enter timber, bears N. and S. |
| 1.00 | <p>100 lks. E. of true corner I set iron U.S. Forest Reserve Boundary Post No. 85, 20 ins. in ground to rock, and build mound of stone, 4 ft. base, 2 ft. high around same, for W. C. to corner of secs. 5, 6, 7 and 8, marked</p> <p style="padding-left: 40px;">W C on top of cap</p> <p style="padding-left: 40px;">T 30 S S 5 in N. E. quadrant</p> <p style="padding-left: 40px;">R 5 E S 8 in S. E. quadrant</p> <p style="padding-left: 40px;">S 7 in S. W. quadrant</p> <p style="padding-left: 40px;">S 6 in N. W. quadrant</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | RESERVE in S. E. and S. W. quadrants, with 5 notches on S. and E. sides. Thence from the true corner I run N. 87°55' E. on true retracement line, between west halves of secs. 5 and 8 over bare rock surface along steep north slope of mountain. |
| 6.50 | Draw, 10 lks. wide, course N. down hillside; begin ascent, bears N. 70° E. and S. 70° W. |
| 12.00 | Top of 50-foot ascent, bears N. 70° E. and S. 70° W. |
| 19.10 | Begin descent, bears N. 70° W. and S. 70° E. |
| 35.00 | Base of 70-foot descent, bears N. E. and S. W. |
| 39.13 | Intersect the 1/4 sec. corner between secs. 5 and 8. Land, mountainous and rolling. Soil, rocky and gravelly. Timber, pinion and cedar. |
| <hr/> | |
| | At corner of secs. 5, 6, 7 and 8, I set off 12°44'45' N. on the declination arc and at 12h03m33s l.m.t., observe sun on the meridian and obtain a reading of 38°14' on the latitude arc. |
| | From true corner of secs 5, 6, 7 and 8 previously described I run |
| | West on random retracement line between secs. 6 and 7 along steep N. slope of bare sand rock ledge. |
| 40.00 | No trace of old 1/4 sec. corner being found, I set iron U. S. Forest Reserve Boundary Post No. 86 30 ins. in ground and build mound of stone, 3 ft. base, 1 ft. high, around same for 1/4 sec. corner, marked T 30 S 1/4 S 6 on N. side R 5 E 1/4 S 7 on S. side, RESERVE in S.E., S.W. and N.W. quadrants, from which A yellow pine, 18 ins. diam., bears N. 34° W., 7 lks. dist., marked RES 1/4 S 6 B T A pinion, 8 ins. diam., bears N. 29° E., 38 lks. dist., marked 1/4 S 6 B T Both trees taken in sec. 6, as none available in sec. 7. |
| | Note: West boundary of township is not reported run further south than 1/4 between 1 and 6. |
| | Thence from the 1/4 corner between secs. 6 and 7 established by me I run |
| | East on true line between secs. 6 and 7, through scattering timber. |
| .50 | Draw, 15 lks. wide, course N. 20° E.; begin ascent. |
| 2.50 | Top of 80-foot precipitous ascent, bears N. 30° E. and S. W.; thence along steep bare rock north slope of mountain. |
| 8.50 | Begin precipitous ascent, bears N. 70° E. and S. 70° W. |
| 11.00 | Top of 100-foot ascent on N. slope of sandstone ledge, bears N. and S., about 250 chs. south of rock saddle, begin precipitous descent, bears N. and S. 60° E. |
| 13.80 | Base of 250-foot descent, bears N. and S., at foot of sandstone ledge, thence through timbered cove. |
| 16.00 | Draw, 10 lks. wide, course N. 70° E., heads in Cove Canyon, 10.00 chs. S. W. |
| 20.75 | Draw, 10 lks. wide, course N. |
| 28.50 | Draw, 10 lks. wide, course N. 20° E.; begin ascent, bears N. 20° E. and S. W. |
| 37.00 | Leave timber and continue ascent up bare sandstone ledge, bears N. and S. |
| 39.00 | Top of 100-foot ascent on north slope of sand rock ledge; begin descent, bears N. 70° W. and S. 70° E. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

Chains.

40.00

Intersect corner of secs. 5, 6, 7 and 8.
Soil, sandy and bare rock.
Timber, pinion and scattering yellow pine in cave.

16.81

39.48

40.00

60.61

73.14

81.57

From the 1/4 sec. corner on south boundary of sec. 6 I run
N. 0°03' W. on random line through center of sec. 6.
Offset east 8.06 chs.
Take up offset west 8.06 chs. to random line.
Set stake for temporary center sec. 6.
Offset east 2.50 chs.
Take up offset west 2.50 chs. to random line.
Intersect north boundary of township 12.28 chs. east of 1/4 sec. corner between secs. 6 and 31, which corner I establish below.
Thence from the 1/4 corner between secs. 6 and 31 I run
S. 8°37' E. on true line through sec. 6.
Draw in flat, course E.
North face of sandstone butte 100 ft. high.
South face of butte, re-enter flat.
True point for center corner established August 20.
Set stake for temporary center corner.
North face of sandstone ridge 200 ft. high.
South face of ridge, bears N. E. and S. W. Draw, 10 lks. wide, course N. E.; thence over rolling timbered land.
Intersect the 1/4 sec. corner between secs. 6 and 7.
Final distance of center from south boundary 42.60, from north boundary 39.90 (see page

7.60

8.50

11.00

39.90

41.25

43.00

65.00

82.50

RETRACEMENT OF FRACTIONAL NORTH BDY. T. 30 S., R. 5 E.

From true point for corner of Tps. 29 and 30 S., Rs. 4 and 5 E., which is 50 lks. south of W. C., I run

East on blank random retracement line between secs. 6 and 31.

39.44

Set stake for temporary 1/4 sec. corner, no trace of old corner being found.

79.80

Intersect N. and S. sec. line 25 lks. N. of corner of secs. 5, 6, 31 and 32.

Thence I run

N. 89°49' W. on true retracement line between secs. 6 and 31 (original line reported 79.44, dividing discrepancy proportionately).

40.18

Set sandstone 20x12x5, 15 ins. in ground, for 1/4 sec. corner marked 1/4 on N. face, and dig pits 18x18x12 ins. N. and W. of corner, 4 ft. dist., and raise mound of earth 3 1/2 ft. base 11 1/2 ft. high north of corner.

79.80

Intersect true point for corner of townships 29 and 30 S., Rs. 4 and 5 E.

August 19, 1904

T. 30 S., Rs. 4 and 5 E.

August 20:

From true point for corner of Tps. 29 and 30 S., Rs. 4 and 5 E., 50 lks. S. of W. C., which is a sandstone correctly marked, but is broken off at surface of ground, and I replace same with

Iron U. S. Forest Reserve Boundary Post No. 89, set 30 ins. in ground, with mound of earth, 3 1/2 ft. base, 11 1/2 ft. high around same, for W. C. to corner of townships 29 and 30 S., Rs. 4 and 5 E. marked

W C on top of cap

T 29 S S 31 in N. E. quadrant

R 5 E S 6 in S. E. quadrant

T 30 S S 1 in S. W. quadrant

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., Rs. 4 and 5 E.

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| Chains. | <p>R 4 E S 36 in N. W. quadrant RESERVE in S. W. quadrant, with 6 notches on N., E., S. and W. sides, and dig pits 24x24x12 on each line N., E. and W., four ft. distant, and S. 8 ft. dist., raise mound of earth, 5 ft. base, 2 1/2 ft. high south of W. C.</p> <p>Thence from true point for corner on north bank of draw, I run Southon random retracement line between secs. 1 and 6.</p> |
| 40.00 | <p>No trace of old 1/4 sec. corner being found and no evidence to show that this line was ever run, I set U. S. Forest Reserve Boundary Post No. 88, 30 ins. in ground and raise mound of earth, 4 ft. base, 1 1/2 ft. high around same, for 1/4 sec. corner, marked T 30 S R 5 E 1/4 S 6 on east half R 4 E 1/4 S 1 on west half RESERVE in S. E., S. W. and N. W. quadrants, from which A pinion, 14 ins. diam., bears N. 65°15' E., 295 lks. dist., marked 1/4 S 6 B T A yellow pine, 16 ins. diam., bears N. 73°45' W., 249 lks. dist., marked RES 1/4 S 1 B T Thence from the 1/4 sec. corner I run North on true line between secs. 1 and 6, over gent- ly rolling land, through scattering timber.</p> |
| 10.00 | <p>Begin precipitous ascent up south side of isolated sandstone ridge, bears E. and W.</p> |
| 28.00 | <p>Top of ridge, 250 ft. high, bears N. E. and S. W.; begin abrupt descent.</p> |
| 34.50 | <p>Base of 250-foot descent, reenter flat, bears N.E. and S. W.</p> |
| 39.80 | <p>Draw, 20 lks. wide, course N. 20° E.</p> |
| 40.00 | <p>Intersect true point for corner of townships 29 and 30 S., Rs. 4 and 5 E. Land, level and precipitous. Soil, sandy and bare rock. Timber, scattering yellow pine in flats.</p> |

T. 30 S., R. 5 E.

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| 79.66 | <p>From the 1/4 sec. corner on west boundary of sec. 6, I run East on random line through center of sec. 5. Intersect east boundary of sec. 6 82 lks. south of the 1/4 sec. corner between secs. 5 and 6, which is a sandstone 12x6x8 ins. above ground, marked and witnessed by three bearing trees, as des- cribed in notes of General Land Office.</p> |
| 33.77 | <p>Thence I run S. 89°25' W. on true line through center of sec. 6. Intersect true line N. and S. through center, 1.35 chs. N. of temporary stake set on true line, run- ning from 1/4 sec. corner on N. Boundary to 1/4 sec. corner on south boundary of S. 6. At the point of intersection I set iron U. S. For- est Reserve Boundary Post No. 87, 30 ins. in ground, and build mound of earth 3 1/2 ft. base, 1 1/2 ft. high, around same for center of corner of sec. 6, marked "CENTER" S 6 around N. semicircle T 30 S In S. W. quadrant R 5 E in S. E. quadrant RESERVE in S. W. quadrant, from which A yellow pine, 22 ins. diam., bears N. 27°30' E., 157 lks. dist., marked N E 1/4 S 6 B T A yellow pine, 22 ins. diam., bears S. 23°30' E., 339 lks. dist., marked S E 1/4 S 6 B T</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 30 S., R. 5 E.

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| Chains. | A yellow pine, 26 ins. diam., bears S. 79° W., 371 lks. dist., marked RES S W 1/4 S 6 B T |
| | A yellow pine, 24 ins. diam., bears N. 32° 45' W., 282 lks. dist., marked N W 1/4 S 6 B T |
| 35.60 | East base of sandstone butte 100 ft. high. |
| 45.30 | West base of butte, reenter flat. |
| 56.40 | Draw, 10 lks. wide, course N. 70° E. |
| 64.00 | Flat wash, 15 lks. wide, course N. 20° E. |
| 68.50 | Draw, 10 lks. wide, 5-foot banks, course N. 30° E. |
| 74.30 | Leave thick timber, enter open flat of scattering timber, bears N. 20° E. and S. 20° W. |
| 76.20 | Draw, 10 lks. wide, course N. 20° E. |
| 79.66 | Intersect 1/4 sec. corner on west boundary of sec. 6. Land, level, rolling flats, dotted with bare rock buttes from 100 to 200 ft. high. Soil, sandy, 3rd and 4th rate. Timber, pinion and scattering yellow pine. |

Previous surveys show the southeast corner of
sec. 6 badly out of place with respect to other
corners of section, and to check my work I begin
at the 1/4 sec. corner on east boundary of sec.
6 and run

East 12.42 chs. and thence south on blank line and
at

| | |
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| 42.35 | Intersect the east and west sec. line 3 lks. east of corner of secs. 5, 6, 7 and 8, which proves my work correct and demonstrates that this line has never been run further south than the 1/4 sec. corner between secs. 5 and 6, and error in chaining on south boundary of sec. 5 was not found on this account. |
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August 20, 1904.

GENERAL DESCRIPTION T. 30 S., R. 5 E.

Is mountainous land, draining to N. E. The foothills
and flats lying in northeastern portion of town-
ship are susceptible and some are now under cul-
tivation in sec. 11, 2, 3 and 5. The township
is watered by Carcas Creek and Fish Creek, both
of which are clear fresh water mountain streams and
are partially used in irrigating. The foothills
and benches and along streams in central and
southern portions of township has scattering yel-
low pine suitable for lumber, and a sawmill is
now in operation in southwestern portion of town-
ship. Much local attraction in township.
Magnetic declination 15° 50' E.

SOUTH BOUNDARY T. 29 S., R. 4 E.

August 22:

At true point for corner of Tps. 29 and 30 S.,
Rs. 4 and 5 E., 50 lks. south of W. C. previous-
ly described, at 7^h 02^m 45^s a.m., l.m.t., I set off
38° 14' 45" on latitude arc and 11° 50' 45" N. on the
declination arc and establish meridian with the
solar. Magnetic declination 16° 10' E.

Thence I run

West on random retracement line between secs. 1
and 36, over level open land.

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| 44.37 | No trace of old W. C. 1/4 sec. corner being found, I set temporary stake at 40.00 chs. and continue west. |
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| 81.60 | Intersect N. and S. sec. line 85 lks. N. of corner of secs. 1, 2, 35 and 36, which is a trachyte stone 8x6x4 ins. correctly marked and lying on top of ground in small pile of stone, and wit- nessed by two bearing trees not called for in notes of General Land Office. This corner being de- |
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AQUARIUS FOREST RESERVE BOUNDARY.

South Bdy. T. 29 S., R. 4 E.

Chains.

fective in size,
I set in its place iron U. S. Forest Reserve Boundary Post No. 90, 18 ins. in ground, to rock and build mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high around same, for corner of secs. 1, 2, 35 and 36, marked
T 29 S S 36 in N. E. quadrant
R 4 E S 1 in S. E. quadrant
T 30 S S 2 in S. W. quadrant
S 35 in N. W. quadrant
RESERVE in S. E., S. W. and N. W. quadrants, with 1 notch on E. and 5 on W. sides, from which
A pinion, 10 ins. diam., bears N. $38^{\circ}15'$ E., 18 lks. dist., marked T 29 S R 4 E S 36 B T (old B T).
A pinion, 10 ins. diam., bears S. $60^{\circ}30'$ E., 10 lks. dist., marked RES T 30 S R 4 E S 1 B T
A pinion, 16 ins. diam., bears S. $84^{\circ}15'$ W., 61 lks. dist., marked RES T 30 S R 4 E S 2 B T
A cedar, 12 ins. diam., bears N. $6^{\circ}30'$ W., 31 lks. dist., marked RES T 29 S R 4 E S 35 B T (old B T).
Thence from this corner I run
N. $89^{\circ}24'$ E. on true retracement line, descending through timber.
16.60 Base of 250-foot descent, bears N. and S.
17.60 Dry branch, 10 lks. wide, course N.
19.50 Begin abrupt ascent, bears N. and S.
22.00 Top of 80-foot ascent, bears N. and S.
23.00 Begin descent, bears N. and S. E.
28.00 Base of 200-foot precipitous descent at gulch, 10 lks. wide, course N.; begin precipitous ascent, bears N. and S.
31.50 Top of 100-foot ascent on north nose of rock spur. Begin descent.
34.60 Base of 100-foot descent at gulch, course N.; begin precipitous ascent.
40.80 Top of 200-foot precipitous ascent, bears N. and S. W.
40.80 At true point for $\frac{1}{4}$ sec. corner I mark cross (\times) on solid rock ledge and mark $\frac{1}{4}$ on N. side of cross, for $\frac{1}{4}$ sec. corner, and build mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, N. of corner. No bearing trees available.
42.70 Begin precipitous descent, bears N. 20° W. and S. 20° E.
48.60 Base of 350-foot precipitous descent, bears N. 30° W. and S. 30° E. Leave bare rock cliffs, enter open flat, with some scattering timber.
81.60 Intersect true point for corner of tps. 29 and 30 S., Rs. 4 and 5 E.
Land, mountainous, precipitous and level.
Soil, rocky, bare rock and sandy, 4th rate.
Timber, pinion and cedar, scattering yellow pine in flat.

At corner of secs. 1, 2, 35 and 36, on south boundary of T. 29 S., R. 4 E., I set off $11^{\circ}45'15''$ N. on the declination arc, and at $12^{\text{h}}02^{\text{m}}49^{\text{s}}$ l.m.t. observe sun on meridian and obtain a reading of $38^{\circ}14'45''$ on latitude arc.
Thence from this corner, which is previously described, I run
N. $0^{\circ}01'$ W. on random retracement line, between secs. 35 and 36.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

Chains.

- 39.46 Intersect E. and W. 1/4 sec. line 40 lks. east of 1/4 sec. corner between secs. 35 and 36, which is a trachyte stone 10x8x6 ins., set 4 ins. in ground; being undersize, I replace same with trachyte 22x14x10 ins., set 15 ins. in ground, for 1/4 sec. corner, marked 1/4 on W. face, from which
- A pinion, 6 ins. diam., bears S. 69° E., 6 lks. dist., old markings 1/4 S B T left undisturbed.
- A cedar, 14 ins. diam., bears S. 34° W., 11 lks. dist., remarked RES 1/4 S 35 B T
- These trees called for in notes as bearing S. 45° E. and S. 45° W.
- Thence from the 1/4 sec. corner I run S. 0°36' E. on true retracement line between south halves of secs. 35 and 36, through timber, along east slope of ridge.
- .50 Begin descent, bears N. 20° E. and S. 20° W.
- 5.50 Draw, 10 lks. wide, course N. E.; begin ascent.
- 13.00 Top of 150-foot ascent, bears N. 60° W. and S. 60° E. Thence over bench.
- 17.50 Begin ascent, bears N. 60° W. and S. 60° E.
- 21.50 Top of 30-foot ascent, bears N. 60° W. and S. 60° E.
- 34.00 Draw, 10 lks. wide, course N. E.
- 39.46 Intersect corner of secs. 1, 2, 35 and 36.
- Thence from the 1/4 sec. corner between secs. 35 and 36, I run N. 0°01' W. on random retracement line.
- 38.77 Intersect E. and W. sec. line 12 lks. W. of corner of secs. 25, 26, 35 and 36, which is a granite 8x6x4 ins., marked and witnessed as described, being undersize and insecurely set I replace same with Iron U. S. Forest Reserve Boundary Post No. 91, set 20 ins. in ground to rock, and build mound of stone, 5 ft. base, 2 ft. high, around same, for corner of secs. 25, 26, 35 and 36, marked
- T 29 S S 25 in N. E. quadrant
R 4 E S 36 in S. E. quadrant
S 35 in S. W. quadrant
S 26 in N. W. quadrant
RESERVE in S. W. quadrant, with 1 notch on E. and S. sides, from which
- Old witness tree, a pine 9 ins. diam., bears N. 11° W., 33 lks. dist., correctly marked as reported.
- Old S. W. bearing tree being dead I take in its stead a Cedar 12 ins. diam., which bears S. 54°15' W., 36 lks. dist., marked RES T 29 S R 4 E S 35 B T; also new additional trees:
- A cedar, 6 ins. diam., which bears N. 78° E., 53 lks. dist., marked T 29 S R 4 E S 25 B T
- A cedar, 10 ins. diam., bears S. 28°30' E., 56 lks. dist., marked T 29 S R 4 E S 36 B T
- Thence from this sec. corner I run S. 0°09' W. on true retracement line, between north halves of secs. 35 and 36, through timber.
- 10.80 Draw, 10 lks. wide, course N. 70° E.
- 13.00 Draw, 10 lks. wide, course N. E.; begin ascent, bears N. E. and W.
- 22.30 Top of 80-foot ascent, bears N. E. and S. W.; thence along steep east slope of spur.
- 38.55 Draw, 10 lks. wide, course N. E., begin ascent.
- 38.77 Intersect the 1/4 sec. corner between secs. 35 and 36, 100 ft. above draw on east slope of spur. Land, mountainous. Soil, rocky, trachyte boulder and sandy, 4th rate. Timber, pinion and cedar, small.

August 22, 1904

AQUARIUS FOREST RESERVE BOUNDARY

T. 29 S., R. 4 E.

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| Chains. | August 23: |
| | No work until p.m. on account of cloudy weather. |
| | From corner of secs. 25, 26, 35 and 36, previously described, I run |
| | West on random retracement line between secs. 26 and 35, through timber. |
| 40.00 | No trace of old 1/4 sec. corner being found I set stake for temporary 1/4 sec. corner. |
| 79.25 | Intersect N. and S. sec. line 2.95 chs. south of corner of secs. 26, 27, 34 and 35, which is a granite 8x6x5 ins., which being under lawful size and insecurely set, I replace with iron U. S. Forest Reserve Boundary Post No. 92, set 24 ins. in ground, and build mound of stone, 4 ft. base 1 1/2 ft. high, around same for corner of secs. 26, 27, 34 and 35, marked: |
| | T 29 S S 26 in N. E. quadrant |
| | R 4 E S 35 in S. E. quadrant |
| | S 34 in S. W. quadrant |
| | S 27 in N. W. quadrant |
| | RESERVE in S. E. and S. W. quadrants, with 2 notches on E. and 1 on S. sides, from which, old bearing tree |
| | A pine, 15 ins. diam., bears N. 30° W., 34 lks. dist., instead of N. 77° W., 34 lks. dist., as called for in notes, marked T 29 S R 4 E S 27 B T |
| | Old northeast bearing tree being dead and fallen, I take in its stead |
| | A cedar, 8 ins. diam., which bears N. 12° E., 56 lks. dist., marked T 29 S R 4 E S 26 B T |
| | Also additional witness tree: |
| | A pinion 8 ins. diam., which bears S. 39°15' E., 41 lks. dist., marked RES T 29 S R 4 E S 35 B T |
| | A pinion, 10 ins. diam., bears S. 36°30' W., 63 lks. dist., marked RES T 29 S R 4 E S 34 B T |
| | Thence from corner of secs. 26, 27, 34 and 35, I run S. 87°52' E. on true retracement line between secs. 26 and 35, through timber descending. |
| 6.75 | Draw, 5 lks. wide, course N., at base of 50-foot descent, bears N. 30° W. and S. 30° E. |
| 8.45 | Creek, 10 lks. wide, 8 ins. deep, course N. 30° W., begin ascent. |
| 16.50 | Old road, bears N. and S. |
| 28.75 | Top of 60-foot ascent, bears N. and S. |
| 39.62 1/2 | Set trachyte stone 22x14x8 ins. 15 ins. in ground for 1/4 sec. corner, marked 1/4 on N. face, from which |
| | A pinion, 8 ins. diam., bears N. 42° W., 27 lks. dist., marked 1/4 S 26 B T |
| | A pinion, 6 ins. diam., bears S. 24° W., 41 lks. dist., marked RES 1/4 S 35 B T |
| 39.90 | Draw, 4 lks. wide, course N. 30° E. |
| 44.00 | Begin descent, bears N. 80° W. and S. E. |
| 51.25 | Draw, 10 lks. wide, course N. 20° E. |
| 63.20 | Flat bottom draw, 10 lks. wide, course N. 20° E. |
| 79.25 | Intersect corner of secs. 25, 26, 35 and 36 on N. E. slope 150 ft. below summit. |
| | Land, rolling and mountainous. |
| | Soil, rocky and gravelly, 4th rate. |
| | Timber, pinion and cedar. |
| | Employ William Brinkerhoff, axeman, L. A. Willis and Albern Allen being transferred as cook and teamster. |
| | August 23, 1904 |
| | August 24, 1904. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

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| | August 24: | |
| Chains. | At corner of secs. 26, 27, 34 and 35, previously described, I set off 38°15'30" on latitude arc and 11°30'30" N. on the declination arc and at 7h02m30s a.m., l.m.t., determine meridian with solar. Magnetic declination 17°00' E. | |
| | Thence I run | |
| | West on random retracement line between secs. 27 and 34, through timber, over rolling rocky surface. | |
| 39.59 | Intersect N. and S. 1/4 sec. line 35 lks. south of the 1/4 sec. corner between secs. 27 and 34, which is a trachyte stone 8x6x4 ins., marked 1/4 on N. face, and set 2 ins. in small pile of small stones; being under lawful size I replace this corner with a trachyte stone 26x16x10 ins., set 18 ins. in ground, marked 1/4 on N. face, from which | |
| | A pinion, 6 ins. diam., bears N. 65° E., 45 lks. dist., marked 1/4 S 27 B T | |
| | A pinion, 6 ins. diam., bears S. 17°45' E., 13 lks. dist., marked RES 1/4 S 34 B T | |
| | Thence from the 1/4 sec. corner I run | |
| | S. 89°30' E., on true retracement line between east halves of secs. 27 and 34, through timber. | |
| .60 | Begin descent, bears N. and S. W. | |
| 6.40 | Base of 30-foot descent, bears N. and S.; thence over bench. | |
| 10.50 | Begin descent, bears N. and S.W. | |
| 19.50 | Base of 80-foot descent, bears N. 30° E. and S. W. | |
| 20.50 | Old road, bears N. 30° E. and S. W. | |
| 22.50 | Dry branch, 15 lks. wide, course N. 30° E., forks from S. and S. W.; begin ascent. | |
| 28.50 | Draw, 10 lks. wide, course N. W. | |
| 38.00 | Top of 60-foot ascent, bears N. E. and S. W. | |
| 39.59 | Intersect the corner of secs. 26, 27, 34 and 35. | |
| | Thence from the 1/4 sec. corner between secs. 27 and 34 I run | |
| | West on random retracement line between west halves of secs. 27 and 34. | |
| 39.88 | Intersect N. and S. sec. line 105 lks. N. of corner of secs. 27, 28, 33 and 34, which is a trachyte stone 10x6x4 ins., set in small pile of stone; being defective in size I set in its stead iron U. S. Forest Reserve Boundary Post No. 93, set 24 ins. in ground, and build mound of stone, 4 ft. base, 1 1/2 ft. high, around same for corner of secs. 27, 28, 33 and 34, marked: | |
| | T 29 S S 27 in N. E. quadrant | |
| | R 4 E S 34 in S. E. quadrant | |
| | S 33 in S. W. quadrant | |
| | S 28 in N. W. quadrant | |
| | RESERVE in S. E., S. W. and N. W. quadrants, with 3 notches on E. and 1 on S. sides, from which | |
| | A pinion, 10 ins. diam., bears N. 33° E., 28 lks. dist., marked T 29 S R 4 E S 27 B T | |
| | A pinion, 12 ins. diam., bears S. 27°30' E., 48 lks. dist., marked RES T 29 S R 4 E S 34 B T | |
| | A pinion, 10 ins. diam., bears S. 22° W., 67 lks. dist., marked RES T 29 S R 4 E S 33 B T | |
| | A pinion, 8 ins. diam., bears N. 24°30' W., 28 lks. dist., marked RES T 29 S R 4 E S 28 B T | |
| | Thence from the corner of secs. 27, 28, 33 and 34, I run | |
| | N. 88°30' E., on true retracement line between secs. 27 and 34. | |
| 1.50 | Draw, 10 lks. wide, course N. | |
| 6.65 | Draw, 10 lks. wide, course N. 20° E., begin ascent; | |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

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| Chains. | bears N. 20° E. and S. 20° W. |
| 12.00 | Top of 50-foot gradual ascent, bears N. 80° E. and S. W. on N. slope of hill. |
| 20.90 | North point of ridge, begin descent. |
| 31.40 | Road, bears N. E. and S. W. |
| 34.00 | Base of 80-foot descent, bears N. E. and S. W. |
| 39.88 | Intersect the 1/4 sec. corner between secs. 27 and 34. |
| | Land, mountainous and rolling. |
| | Soil, rocky and sandy, 4th rate. |
| | Timber, pinion and juniper, some yellow pine on south side of line. |
| | At corner of secs. 27, 28, 33 and 34, I set off 11°04'30" N. on declination arc and at 12 ^h 02 ^m 18 ^s l.m.t., observe sun on meridian and obtain reading of 38°15'30" on latitude arc. |
| | Thence from this corner, which is previously described I run |
| | North 0°02' W. on random retracement line between secs. 27 and 28, through timber. |
| 40.42 | Intersect E. and W. 1/4 sec. line 59 lks. W. of the 1/4 sec. corner between secs. 27 and 28, which is a trachyte stone 12x8x6 ins., set on top of ground in small pile of stone. I set in its stead a trachyte 26x14x10 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on W. face, from which |
| | A pinion, 6 ins. diam., bears N. 61° W., 55 lks. dist., marked RES 1/4 S 28 B T |
| | A pinion, 6 ins. diam., bears N. 47° E., 62 lks. dist., marked 1/4 S 27 B T |
| | Thence from the 1/4 sec. corner I run |
| | S. 0°48' W. on true retracement line between south halves of secs. 27 and 28, through timber descending. |
| 8.40 | Draw, 15 lks. wide, course N. 80° E., base of 80-foot descent, begin ascent. |
| 12.00 | Draw, 10 lks. wide, course N. 20° E. |
| 20.10 | Same draw, course N. 20° W. |
| 23.40 | Same draw, course N. 20° E. |
| 40.42 | Intersect corner of secs. 27, 28, 33 and 34 on N. slope 150 ft. above draw at 8.40. |
| | Thence from 1/4 sec. corner between secs. 27 and 28 I run |
| | North 0°02' W. on random retracement line between north halves of secs. 27 and 28. |
| 39.59 | Intersect E. and W. sec. line 12 lks. W. of corner of secs. 21, 22, 27 and 28, which is a trachyte 8x6x5 ins., properly marked, but set on top of ground in small pile of stone; being defective corner I replace it with iron U. S. Forest Reserve Boundary Post No. 94, set 24 ins. in ground and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 21, 22, 27 and 28, marked |
| | T 29 S S 22 in N. E. quadrant |
| | R 4-E S 27 in S. E. quadrant |
| | S 28 in S. W. quadrant |
| | S 21 in N. W. quadrant |
| | RESERVE in S. W. quadrant, with 3 notches on E. and 2 on S. sides, from which |
| | A pinion, 6 ins. diam., bears N. 10°15' E., 229 lks. dist., marked T 29 S R 4 E S 22 B T |
| | A cedar, 14 ins. diam., bears S. 39° E., 23 lks. dist., marked T 29 S R 4 E S 27 B T |
| | A pinion, 8 ins. diam., bears S. 79°45' W., |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

Chains. 234 lks. dist., marked RES T 29 S R 4 E
S 28 B T
A pinion, 12 ins. diam., bears N. 21° W., 180
lks. dist., marked T 29 S R 4 E S 21 B T
Thence from corner of secs. 21, 22, 27 and 28, I run
S. 0°08' W. on true retracement line between secs.
27 and 28, through timbered flat.
4.20 Draw, 5 lks. wide, course E.
11.15 Draw, 15 lks. wide, course E.
15.10 Begin ascent, bears E. and W.
24.60 Top of 80-foot ascent, bears E. and W.
31.60 Draw, 10 lks. wide, course N. 60° E.
37.50 Begin descent, bears E. and W.
39.59 Intersect the 1/4 sec. corner between secs. 27 and
28, 30 feet below last summit.
Cloudy after 3.30 p/m., no work.

August 24, 1904.

August 25: At corner of secs. 21, 22, 27 and 28,
I set off 38°16'30" on latitude arc and 10°49'30"
N. on declination arc, and at 7^h02^m a.m., l.m.t.,
establish meridian with solar.

Thence I run

West on random retracement line between secs. 21
and 28 over nearly level flat, through scattering
timber.

40.16 Intersect N. and S. 1/4 sec. line 6 lks. N. of 1/4
sec. corner, which is a trachyte 10x6x5 ins.,
set on top of ground in small stone pile; being
defective I set in its stead a trachyte 24x12x5
ins., 18 ins. in ground for 1/4 sec. corner,
marked 1/4 on N. face, from which
A pinion, 10 ins. diam., bears N. 1°30' E.,
115 lks. dist., marked 1/4 S 21 B T
A pinion, 14 ins. diam., bears S. 13° E., 56
lks. dist., marked RES 1/4 S 28 B T

Thence I run

E. 89°55' E., on true retracement line between east
halves of secs. 21 and 28, over level ground,
through scattering timber.

1.70 Leave flat, begin gradual ascent, bears N. 60° E.
and S. 60° W.
3.00 Top of 20-foot ridge, bears N. 60° E. and S. 60° W.
5.20 Base of ridge, recenter flat, bears N. 60° E. and
S. 60° W.
10.70 Road, bears N. 60° W. and S. 60° E.
15.20 Pole fence, bears N. 10° E. and S. 10° W.
34.00 Same road, bears N. 80° E. and S. 80° W.
40.16 Intersect corner of secs. 21, 22, 27 and 28.

Thence from 1/4 sec. corner between secs. 21 and 28
I run

West on random line between west halves of secs.
21 and 28.

37.10 Intersect N. and S. sec. line 2.00 chs. south of
corner to secs. 20, 21, 28 and 29, which is a
limestone rock 28x16x1 ins. lying on top of ground
in small pile of stone; being defective in thick-
ness, I replace same with iron U. S. Forest Re-
serve Boundary Post No. 95, set 30 ins. in ground,
and build mound of stone 3 1/2 ft. base, 1 1/2 ft.
high, around same for corner of secs. 20, 21, 28
and 29, marked:
T 29 S S 21 in N. E. quadrant
R 4 E S 28 in S. E. quadrant
S 29 in S. W. quadrant
S 20 in N. W. quadrant
RESERVE in N.W., S.W. and S.E. quadrants, with
4 notches on E. and 2 on S. sides, from which

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

Chains. A pinion, 8 ins. diam., bears N. 13° E., 26
lks. dist., marked T 29 S R 4 E S 21 B T
A pinion, 8 ins. diam., bears S. 58°45' E.,
18 lks. dist., marked RES T 29 S R 4 E
S 28 B T
A pinion, 8 ins. diam., bears S. 82° W., 21
lks. dist., marked RES T 29 S R 4 E S 29
B T
A pinion, 10 ins. diam., bears N. 66°30' W.,
57 lks. dist., marked RES T 29 S R 4 E
S 20 B T
Thence I run
S. 86°54' E. on true retracement line between
secs. 21 and 28, through timber, descending.
2.00 Base of 30-foot descent; enter open flat, scatter-
ing timber, bears N. and S.
13.30 Draw, 5 lks. wide, course N. 70° E.
23.00 Draw, 10 lks. wide, course N. 70° E.
33.00 Old road, bears N. 60° E. and S. 60° W.
37.10 Intersect the 1/4 sec. corner between secs. 21 and
28.
Land, level and rolling.
Soil, sandy, 4th rate.
Timber, scattering pinion-pine and cedar.
Cloudy weather prevents work in p.m.
Local attraction on this mile.

August 25, 1904

August 26: At corner of secs. 20, 21, 28 and 29,
I set off 38°16'30" on latitude arc and 10°28'45"
N. on the declination arc and at 7h01m45s a.m.,
l.m.t., and establish meridian with solar.
Thence I run
N. 0°02' W. on random retracement line between
secs. 20 and 21.
40.30 Intersect E. and W. 1/4 sec. line 18 lks. east of
1/4 sec. corner between secs. 20 and 21, which
is a limestone 12x10x4 ins. on top of ground
in small pile of stone; being defective in size
and insecurely set, I replace with a limestone
24x14x4 ins., 16 ins. in ground, for 1/4 sec.
corner, marked 1/4 on W. face, from which
A pinion, 12 ins. diam., bears S. 63°45' E.,
174 lks. dist., marked 1/4 S 21 B T
A pinion, 12 ins. diam., bears N. 46° W., 125
lks. dist., marked RES 1/4 S 20 B T
Thence I run
S. 0°17' E. on true retracement line between
south halves of secs. 20 and 21, through scat-
tering timber.
7.00 Begin descent, bears N. E. and S. 80° W.
9.30 Base of 30-foot descent, leave scattering timber,
enter open flat.
13.15 Enter cultivated wheatfield, bears N. 80° E. 10.00
chs., then S., and S. 80° W. 2.00 chs.; then S.
16.40 Leave cultivated ground, bears N. 80° E. and
S. 80° W.; enter open flat.
22.00 Draw, 12 lks. wide, 10 ft. banks, course N. E.;
some water in head of draw, taken N. across flat
for irrigating field.
23.80 Leave flat, begin ascent, enter timber, bears N.E.
and S. 20° W.
30.50 Top of 90-foot ascent, bears N. E. and S. W.
35.00 Begin descent, bears N. E. and S. 20° W.
40.30 Intersect corner of secs. 20, 21, 28 and 29.
Thence from 1/4 sec. corner between secs. 20 and
21 I run
N. 0°02' W. on random retracement line between

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

- Chains. north halves of secs. 20 and 21.
 38.38 Intersect E. and W. sec. line 287 lks. east of corner of secs. 16, 17, 20 and 21, which is a sandstone 12x10x6 ins., set on solid rock in mound of stone, correctly marked and witnessed by
- A pine, 12 ins. diam., which bears S. 60° W., 85 lks. dist., instead of S. 85° W., 60 lks. dist., as reported, and is correctly marked T 29 S R 4 E S 20 B T. I add RES above the other markings., and take following bearing trees additional:
 - A pinion, 10 ins. diam., bears N. 52°30' E., 84 lks. dist., marked T 29 S R 4 E S 16 B T
 - A pinion, 10 ins. diam., bears S. 39° E., 102 lks. dist., marked T 29 S R 4 E S 21 B T
 - A yellow pine, 12 ins. diam., bears N. 48° W., 78 lks. dist., marked T 29 S R 4 E S 17 B T
- 5 lks. south of this corner I set iron U. S. Forest Reserve Boundary Post No. 96 on solid sandstone bare rock and build mound of stone, 8 ft. base, 4 ft. high, around same for witness corner to corner of secs. 16, 17, 20 and 21, marked
 T 29 S S 16 in N. E. quadrant
 R 4 E S 21 in S. E. quadrant
 S 20 in S. W. quadrant
 S 17 in N. W. quadrant
 W C on top of cap
 RESERVE in S. W. quadrant, with 4 notches on E. and 3 on S. sides.
 Thence from true corner I run
 S. 4°17' E. on true retracement line between secs. 20 and 21.
- 8.00 Draw, 10 lks. wide, course N. 20° E.; begin abrupt ascent over nearly bare rock surface of peculiar appearance and is apparently gypsum, partially, covered with travertim or volcanic glass.
- 9.00 Side hill draw, course W.
- 25.40 Top of 350-foot ascent, bears N. E. and W.
- 26.00 Begin descent, bears E. and W.
- 33.00 Draw, 5 lks. wide, course S. 30° E., at base of 100-foot descent.
- 38.38 Intersect the 1/4 sec. corner between secs. 20 and 21.
 Land, mountainous and level.
 Soil, sandy, 3rd rate and rocky and bare rock, 4th rate.
 Timber, pinion-pine and cedar.
-
- At corner of secs. 16, 17, 20 and 21, I set off 10°23' N. on the declination arc and at 12^h01^m46^s, l.m.t., observe sun on meridian and obtain a reading of 38°17'15" on latitude arc.
 Thence from this corner I run
 West on random retracement line between secs. 17 and 20.
- 40.07 Intersect N. and S. 1/4 sec. line 40 lks. N. of 1/4 sec. corner between secs. 17 and 20, which is a trachyte stone 6x5x4 ins. on top of ground in small pile of stone; being defective in size I replace same with limestone 22x10x3 ins., set 15 ins. in ground for 1/4 sec. corner, marked 1/4 on N. face, from which old bearing tree
 A pine, 8 ins. diam., bears N. 72°30' W., 46 lks. dist., instead of N. 65° W., 46 lks., as called for in notes of General Land Office, correctly marked. I take as additional witness tree

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

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| Chains. | A pinion, 10 ins. diam., which bears S. 8° W., 235 lks. dist., marked RES $\frac{1}{4}$ S 20 E T |
| | Thence from this $\frac{1}{4}$ sec. corner I run |
| | N. 89°26' E. on true retracement line between east halves of secs. 17 and 20, through timbered flat. |
| 1.70 | Draw, 5 lks. wide, course N. |
| 3.30 | Draw, 8 lks. wide, course N.; leave flat, begin gradual ascent. |
| 8.00 | Road on top of 20-foot ridge, bears N. and S. |
| 10.00 | Reenter flat at E. base of low ridge, bears N. and S. |
| 15.00 | Teasdale Creek, 6 lks. wide, 8 ins. deep, slightly saline water, course N. |
| 16.90 | Road, bears N. and S. |
| 17.50 | Begin abrupt ascent over bare gypsum ridge, bears N. and S. |
| 25.50 | Top of 250-foot ascent on N. point of bare ridge, begin abrupt descent. |
| 35.50 | Base of 300-foot descent, bears N. W. and S. E. |
| 37.00 | Draw, 8 lks. wide, course N. E. |
| 40.07 | Intersect corner of secs. 16, 17, 20 and 21. Rain prevents further work. |
| | August 26, 1904. |
| | August 27: At the $\frac{1}{4}$ sec. corner between secs. 17 and 20, I set off 38°17'15" on latitude arc and 10°07'45" N. on declination arc, and establish meridian with solar at 7 ^h 01 ^m 30 ^s a.m., l.m.t. |
| | Thence I run |
| | West on random retracement line between secs. 17 and 20. |
| 39.60 | Intersect N. and S. sec. line 383 lks. S. of corner of secs. 17, 18, 19 and 20, which is a trachyte stone 12x12x8 ins. above ground, and correctly marked. Thence from true corner of secs. 17, 18, 19 and 20, I run S. 84°29' E. on true retracement line, between secs. 17 and 20 over timbered bench. |
| .04 | I set iron U.S. forest Reserve Boundary Post No. 97, 24 ins. in ground, for W.C. to corner of secs. 17, 18, 19 and 20, marked W C on top of cap T 29 S S 17 in N. E. quadrant R 4 E S 20 in S. E. quadrant S 19 in S. W. quadrant S 18 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 5 notches on E. and 3 on S. faces; from the true corner A pinion, 12 ins. diam., bears N. 40°15' E., 36 lks. dist., I mark T 29 S R 4 E S 17 B T A pinion, 14 ins. diam., bears S. 67°30' E., 74 lks. dist., marked RES T 29 S R 4 E S 20 B T A pinion, 8 ins. diam., bears S. 21°30' W., 72 lks. dist., marked RES T 29 S R 4 E S 19 B T A pinion, 10 ins. diam., bears N. 24°15' W., 36 lks. dist., marked T 29 S R 4 E S 18 B T |
| 3.00 | Begin abrupt descent over nearly bare rock surface, bears N. 20° E. and S. 20° W. |
| 19.30 | Wash, 10 lks. wide, course S. 80° E., at base of 350-foot descent, bears N. 20° E. and S. 30° E. |
| 27.00 | Draw, 10 lks. wide, course N. E. |
| 39.78 | Intersect the $\frac{1}{4}$ sec. corner between secs. 17 and 20. Land, rolling and precipitous. Soil, sandy and rocky bare shale rock, 4th rate. Timber, pinion pine and cedar. |
| | From corner of secs. 17, 18, 19 and 20 previously described, I run |
| | West on random retracement line between secs. 18 and 19, through timber ascending. |
| 40.00 | No trace of $\frac{1}{4}$ sec. corner and no chopping or blazing found on line, set temporary stake and continue W. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

Chains

80.20

Intersect N. and S. range line 91 lks. N. of corner of secs. 13, 18, 19 and 24, which is a trachyte stone 10x6x4 ins. on top of ground in small pile of stone and witnessed by

A pine, 12 ins. diam., bears N. 20° W., 55 lks. dist., instead of N. 85° W., 55 lks., as reported in notes of General Land Office, correctly marked.

This corner being defective in size and insecurely set, I replace same with iron U. S. Forest Reserve Boundary Post No. 98, set 30 ins. in ground and erect mound of stone, 4 ft. base, 1 ft. high, around same for corner of secs. 18 and 19.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 4 E.

Chains

marked T. 29 S S 18 in N. E. quadrant
R 4 E S 19 in S. E. quadrant
RESERVE in S. E. quadrant, with 3 notches on
N. and S. faces, from which
A pinion, 10 ins. diam., bears N. 32°30' E.,
46 lks. dist., marked T 29 S R 4 E S 18
B T
A pinion, 10 ins. diam., bears S. 83° E., 82
lks. dist., marked RES T 29 S R 4 E S 19
B T

Chop out markings on old N. W. bearing tree, making
corner common to secs. 18 and 19 only.

Thence from this corner I run

N. 89°21' E. on true retracement line between
secs. 18 and 19, through scattering timber, over
partially bare rock surface, ascending abruptly,
bears N. and S.

40.30

Note; Length of mile reported 80.40 found 80.20 .
Maintaining original proportion gives 40.30 and
39.90 for lengths of west and east halves, res-
pectively.

Set trachyte stone 18x10x8 ins., 12 ins. in ground
for 1/4 sec. corner, marked 1/4 on N. face, from
which

A cedar, 10 ins. diam., bears N. 48° W., 26
lks. dist., marked 1/4 S 18 B T

A pinion, 12 ins. diam., bears S. 25° W., 29
lks. dist., marked RES 1/4 S 19 B T

54.00

Top of 450 ft. ascent on timbered mountain, bears
N. and S.

57.00

Head of draw, course S.

59.00

Begin descent, bears N. and S.

80.20

Intersect corner of secs. 17, 18, 19 and 20,
which is 300 ft. below summit of mountain.

Land, mountainous.

Soil, rocky and bare rock, 4th rate.

Timber, small pinion-pine and cedar.

Too cloudy for noon observation.

August 27, 1904.

GENERAL DESCRIPTION.

T. 29 S., R. 4 E., is mountainous in S. W. portion,
the reserve line running well up on foot hills and
this portion of township is timbered with cedar
and pinion-pine. It is traversed by Teasdale
Creek in western portion and another creek in
south central portion, draining to N. E. into Fre-
mont Creek or Dirty Devil River, which latter
traverses the northwest and central eastern portions
of township. The valley of this river is set-
tled up. Town of Teasdale, a settlement of three
or four hundred people, lies in secs. 16 and 15.
Formation is sandstone with large quantities of gypsum
on surface, especially in sec. 20.
Magnetic declination 16°50' E.

T. 29 S., R. 3 E.

August 29: The corner of secs. 14, 15, 22 and 23
is a mound of stone with stake in center and is
said to be original position of corner by oldest
settlers.

In order to verify the position I run

N. 0°01' W. between secs. 14 and 15 on blank re-
tracement line.

79.66

Intersect E. and W. sec. line 25 lks. west of
corner of secs. 10, 11, 14 and 15, which is a

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains. | trachyte stone 18x10x6 ins., set in mound of stone and marked with 2 notches on E. and improperly with 2 on S. faces. Thence on true line I run S. 0°10' W., between secs. 14 and 15. Road, bears N. E. and S. W. Fence, bears N. E. and S. W., enter meadow. Pine Creek, course N. E. Fence E. and W.; no trace of old 1/4 sec. corner. Road bears E. and W. Irrigation ditch, course N. E. Intersect corner of secs. 14, 15, 22 and 23, at which point, I set a trachyte 28x16x12 ins. 6 ins. in ground to solid rock and build mound of stone around same for corner of secs. 14, 15, 22 and 23, marked with 2 notches on E. and 3 on S. faces, from which A pinion, 10 ins. diam., bears N. 43°30' W., 129 lks. dist., marked T 29 S R 3 E S 15 B T No other trees available; pits impracticable. Land, rolling and level. Soil, rocky and marshy, 3rd and 4th rate. Timber, none. Cloudy after 10 a.m.; no further work. August 29, 1904. |
| | August 30: As no trace of the 1/4 sec. corner between secs. 13 and 14 can be found, at corner of secs. 11, 12, 13 and 14, I set off on latitude arc 38°18' and on declination arc 9°04' N. and at 7 ^h 00 ^m 30 ^s a.m., l.m.t., establish meridian with solar. Thence from corner of secs. 11, 12, 13 and 14, which is trachyte boulder in place 27/2x2x1 ft. marked as described in notes of General Land Office; 3 ft. west of corner I build witness mound of stone, 3 1/2 ft. base, 2 ft. high. I run S. 0°01' E. on true line between secs. 13 and 14, over rocky prairie land ascending. 5.50 Top of 100-foot ascent, bears N. 70° E. and S. 70° W. 7.50 Old Blackhawk Indian Fort, which is wall of rock 200 x 100 ft., bears W. 5.00 chs. dist., on summit of N. end of ridge. 15.00 Begin ascent, bears N. E. and S. W. 35.00 Top of 150-foot ascent, bears N. 30° E. and S. 70° W. 40.00 No trace of old corner being found I set trachyte 18x14x12 ins., 12 ins. in ground, for 1/4 sec. corner, marked 1/4 on W. face, from which A pinion, 10 ins. diam., bears S. 15°15' E., 246 lks. dist., marked 1/4 S 13 B T A pinion, 12 ins. diam., bears N. 68° W., 287 lks. dist., marked 1/4 S 14 B T 53.25 Draw, 5 lks. wide, course N. W. 69.00 Draw, 5 lks. wide, course N. 80° W. 70.00 Leave prairie, enter scattering timber, bears E. and W. 80.00 Set stake for temporary corner of secs. 13, 14, 23, and 24 until after E. and W. line is run, after which 79.50 Is at corner of secs. 13, 14, 23 and 24, as described on page From corner of secs. 14, 15, 22 and 23, previously described, I run East on random line between secs. 14 and 23 and 13 and 24. 40.00 Set stake for temporary 1/4 corner. 80.20 Intersect N. and S. sec. line 50 lks. N. of stake set for temporary corner on line south between |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains. | secs. 13 and 14, to which point I move stake and leave same for temporary corner of secs. 13, 14, 23 and 24. |
| 120.20 | Set stake for temporary 1/4 sec. corner between secs. 13 and 24. |
| 160.41 | Intersect east boundary of township 127 lks. south of corner of secs. 18 and 19, and as return bearing would deviate from west more than 21' of arc, I set at this point a limestone 20x14x8 ins., 15 ins. in ground, for C. C. of secs. 13 and 24, marked C C on W. face, with 3 notches on N. and S. faces, from which A pinion, 10 ins. diam., bears N. 76°30' W., 52 lks. dist., marked C C T 29 S R 3 E S 13 B T A pinion, 12 ins. diam., bears S. 85°30' W., 85 lks. dist., marked RES CC T 29 S R 3 E S 24 B T |
| | Mound of stone, 4 ft. base, 3 ft. high, W. of corner. |
| | Thence from C C of secs. 13 and 24, I run West on true line between secs. 13 and 24, through scattering timber, descending. |
| 8.20 | Base of 150 ft. descent, bears N. and S. E. |
| 11.50 | Brook, 2 lks. wide, 2 ins. deep, gypsum water, course N. 20° W. |
| 15.20 | Government Creek, 20 lks. wide, 15 ft. banks, stream fresh water, 4 lks. wide, 3 ins. deep, course N. |
| 17.00 | Begin ascent, bears N. and S. over bare gypsum hill. |
| 24.00 | Top of 80-foot ascent, bears N. and S. |
| 27.10 | Wash, 5 lks. wide, course S. W. |
| 36.00 | Base of 80-foot descent, bears N. and S. |
| 38.10 | Dry Branch, 10 lks. wide, 20-foot banks, course N. 20° W. |
| 40.10 ¹ / ₂ | Set trachyte stone 22x16x3 ins., 18 ins. in ground for 1/4 sec. corner, marked 1/4 on N. face, from which A pinion, 24 ins. diam., bears S. 39° W., 289 lks. dist., marked RES 1/4 S 24 B T No other trees available; I dig pits 18x18x12 ins. E. and W. of corner, 3 ft. dist., and raise mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of corner. |
| 44.60 | Draw, 5 lks. wide, course N., timber becomes more dense. |
| 50.30 | Draw, 10 lks. wide, course N. 20° E. |
| 51.00 | Begin ascent, bears N. and S. 30° W. |
| 60.20 | Top of 200-foot ascent, bears N. and S. |
| 71.00 | Old road, bears N. and S. in open flat. |
| 80.21 | At point of intersection with true line south between secs. 13 and 14, I set iron U. S. Forest Reserve Boundary Post No. 99, 30 ins. in ground, and build mound of stone 3 1/2 ft. base, 1 ft. high, around same for corner of secs. 13, 14, 23 and 24, marked T 29 S S 13 in N. E. quadrant R 3 E S 24 in S. E. quadrant S 23 in S. W. quadrant S 14 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 1 notch on E. and 3 on S. sides, from which A pinion, 12 ins. diam., bears N. 4°45' E., 51 lks. dist., marked T 29 S R 3 E S 13 B T A pinion, 12 ins. diam., bears S. 24°45' E., 39 lks. dist., marked RES T 29 S R 3 E S 24 B T |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains. | <p>A cedar, 14 ins. diam., bears S. 6°45' W., 64 lks. dist., marked RES T 29 S R 3 E S 23 B T</p> <p>A cedar, 14 ins. diam., bears N. 39°45' W., 45 lks. dist., marked T 29 S R 3 E S 14 B T</p> <p>Making length of line between secs. 13 and 14 79.50 chs.</p> <p>Land, mountainous and rolling.</p> <p>Soil, rocky, boulders, sandy and bare rock, 4th rate.</p> <p>Timber, pinion pine and cedar.</p> |
| | <p>At corner of secs. 13, 14, 23 and 24, I set off 8°58' N. on declination arc and at 12^h00^m36^s l.m.t., observe sun on meridian and obtain reading of 38°17' on latitude arc.</p> |
| | <p>From corner of secs. 13, 14, 23 and 24 previously described I run</p> |
| 10.00 | <p>West on true line between secs. 14 and 23, through scattering timber, over rolling stony land.</p> |
| 21.50 | <p>Leave scattering timber, enter prairie, with occasional tree, bears N. E. and S. W.</p> |
| 37.50 | <p>Begin descent, bears N. and S.</p> |
| 40.10 | <p>Base of 150-foot descent, at: draw 15 lks. wide, course N. 20° W.; old road in bed of draw; begin ascent, bears N. 20° W. and S. 20° E.</p> |
| | <p>Set trachyte stone 24x14x8 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, from which</p> |
| | <p>A pinion, 26 ins. diam., bears N. 83° E., 169 lks. dist., marked 1/4 S 14 B T</p> |
| | <p>No other trees available. I build mound of stone 3 1/2 ft. base, 2 ft. high, 3 ft. N. of corner.</p> |
| 49.70 | <p>Top of 150-foot ascent, bears N. 80° W. and S. 30° E.</p> |
| 50.20 | <p>Begin descent, bears N. and S.</p> |
| 80.20 | <p>Intersect corner of secs. 14, 15, 22 and 23.</p> |
| | <p>Land, hilly and rolling, covered with trachyte boulders.</p> |
| | <p>Soil, rocky and sandy, 4th rate.</p> |
| | <p>Timber, scattering pinion and cedar.</p> |
| | <p>Corner falls near base of descent, 200 ft. below summit.</p> |
| | <p>August 30, 1904.</p> |
| | <p>August 31: From corner of secs. 14, 15, 22 and 23, previously described, I run</p> |
| | <p>West on random retracement line between secs. 15 and 22.</p> |
| 40.00 | <p>No trace of old 1/4 corner being found, I set stake for temporary 1/4 corner.</p> |
| 80.00 | <p>No trace of old sec. corner being found, I set stake for temporary corner of secs. 15, 16, 21 and 22.</p> |
| | <p>As no evidence exists of the original position of this corner and as only the lines north and east from here are reported surveyed, I proceed to corner of secs. 9, 10, 15 and 16, which is a trachyte stone 8x6x5 ins. above ground, marked 3 on east and improperly 2 on south.</p> |
| | <p>From this corner I run</p> |
| | <p>S. 0°10' W. between secs. 15 and 16, parallel to east boundary of sec. 15.</p> |
| 40.00 | <p>No trace of old 1/4 sec. corner.</p> |
| 78.57 | <p>Intersect E. and W. line 40 lks. east of temporary stake, at which intersection I set iron U. S.</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains | <p>Forest Reserve Boundary Post No. 101, 28 ins. in ground, and erect mound of stone, 3 ft. base, 1 1/2 ft. high around same for corner of secs. 15, 16, 21 and 22, marked.</p> <p>T 29 S S 15 in N. E. quadrant R 3 E S 22 in S. E. quadrant S 21 in S. W. quadrant S 16 in N. W. quadrant RESERVE in S. E. quadrant, with 3 notches on S. and E. sides; 6 ft. west of corner I erect mound of stone, 4 ft. base, 3 ft. high; pits impracticable.</p> <p>Thence from this corner I run East on true line between secs. 15 and 22, over rolling, rocky prairie.</p> <p>9.00 Draw, 8 lks. wide, course S. E. 28.60 Flat bottom draw, 15 lks. wide, course N. E. Road in draw bears N. E. and S. W. 30.00 Fence, bears N. E. and S. W.; leave prairie, enter field. 30.20 Irrigation ditch, course N. E. 32.60 Irrigation ditch, course N. E. 39.80 Set trachyte stone 22x12x6 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and 3 ft. north of corner raise mound of stone, 3 ft. base, 2 1/2 ft. high; pits impracticable.</p> <p>40.05 Corner of fence running N. and E., bears N., 34 lks. dist. 45.20 Pine creek, 10 lks. wide, 6 ins. deep, course N. 20° E. 45.30 Fence, bears N. and S. 51.70 Irrigation ditch, course N. 64.67 Fence, course N. 30° E. and S. 20° E. 10 lks. N. Fence joins from W.; leave field, enter prairie. 65.60 Road bears N. 30° E. and S. 20° E., around foot-hills; begin gradual ascent. 67.70 Irrigation ditch, course N. 20° E. 73.10 Draw, 10 lks. wide, course N. W. 79.50 10 lks. west of this corner I set U. S. Forest Reserve Boundary Post No. 100, 24 ins. in ground, and build mound of stone, 4 ft. base, 1 1/2 ft. high, around same for witness corner to corner of secs. 14, 15, 22 and 23, marked</p> <p>W. C. on top of cap T 29 S S 14 in N. E. quadrant R 3 E S 23 in S. E. quadrant S 22 in S. W. quadrant S 15 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 2 notches on E. and 3 on S. sides.</p> <p>79.60 Intersect corner of secs. 14, 15, 22 and 23, 50 ft. above road. Land, rolling and level. Soil, sandy loam and rocky, 3rd and 4th rate. No timber. No work after 9.30 a.m. on account of rain and cloudy weather.</p> |
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August 31, 1904.

September 1: At corner of secs. 4, 5, 32 and 33, Tps. 29 and 30 S., R. 3 E., which is a trachyte stone 10x10x10 ins. above ground, firmly set and marked correctly and witnessed by mound of stone on W., as described in notes furnished by Surveyor General of Utah.

I set off 38°14'45" on latitude arc and 8°20'45" N. on the declination arc and at 7^h a.m., l.m.t., establish meridian with solar.

Thence from true corner I run

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

Chains. N. 0°02' W. on true line between secs. 32 and 33, over level bottom land, covered with sage brush.
.05 I set iron U. S. Forest Reserve Boundary Post No. 105, 30 ins. in ground, and raise mound of stone 3 ft. Base, 1 ft. high, around same for witness corner to corner of secs. 4, 5, 32 and 33, marked W C on top of cap
T 29 S S 33 in N. E. quadrant
R 3 E S 4 in S. E. quadrant
T 30 S S 5 in S. W. quadrant
S 32 in N. W. quadrant
RESERVE in N.E., S.E. and S.W. quadrants, with 4 notches on E. and 2 on W. faces.
2.00 Leave bottom land; begin ascent, bears N. W. and S. E.
6.00 Top of 50-foot ascent, bears N. W. and S. E.; thence over rolling prairie land dotted with occasional cedar and pinion bushes.
30.00 Begin gradual descent, bears N. W. and S. E.
37.00 Draw, 5 lks. wide, course N. W.
40.00 Set trachyte stone 20x14x8 ins., 15 ins. in ground, for 1/4 sec. corner, marked 1/4 on W. face, from which
A pinion, 12 ins. diam., bears N. 65° E., 154 lks. dist., marked RES 1/4 S 33 B T
A pinion, 10 ins. diam., bears S. 79°15' W., 15 lks. dist., marked 1/4 S 32 B T
42.80 Base of 50-foot descent; draw, 8 lks. wide, course N. E.
53.20 Draw, 10 lks. wide, course N. 60° W.; begin ascent.
60.00 Top of 60-foot ascent on W. slope of hill.
63.00 Begin descent, bears N. 70° E. and S. 70° W.
69.60 Base of 100-foot descent at draw, 5 lks. wide, course N. E.; thence across level bench.
80.00 Set iron U. S. Forest Reserve Boundary Post No. 104, 30 ins. in ground, and raise mound of stone 3 1/2 ft. base, 1 ft. high, around same, for corner of secs. 28, 29, 32 and 33, marked
T 29 S S 28 in N. E. quadrant
R 3 E S 33 in S. E. quadrant
S 32 in S. W. quadrant
S 29 in N. W. quadrant
RESERVE in N. E. and S. E. quadrants, with 4 notches on E. and 1 on S. sides, from which
A pinion, 10 ins. diam., bears N. 50°30' E., 136 lks. dist., marked RES T 29 S R 3 E S 28 B T
A pinion, 10 ins. diam., bears S. 12°15' E., 297 lks. dist., marked RES T 29 S R 3 E S 33 B T
A pinion, 12 ins. diam., bears S. 35°30' W., 92 lks. dist., marked T 29 S R 3 E S 32 B T
No other tree available.
Land, rolling and hilly.
Soil, rocky and gravelly, 4th rate.
Timber, scattering pinion and cedar.

From corner of secs. 28, 29, 32 and 33, I run N. 0°02' W. on true line between secs. 28 and 29, over level prairie bench.
4.90 Begin abrupt descent, bears N. 80° E. and S. 80° W., down S. wall of canyon.
7.00 Pine creek, 15 lks. wide, 10 ins. deep, course N. 80° E., in 50-foot canyon.
9.20 Top of 50-foot north wall of canyon; thence over rolling prairie, with occasional pinion trees.
35.20 Draw, 5 lks. wide, course E.
40.00 Set trachyte stone 20x12x8 ins., 15 ins. in ground

ACQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains. | for 1/4 sec. corner, marked 1/4 on W. face; 4 ft. west of corner raise mound of stone, 4 ft. base, 2 1/2 ft. high; pits impracticable. |
| 54.05 | Draw, 10 lks. wide, course E. |
| 67.50 | Draw, 8 lks. wide, course N. 80° E. |
| 75.50 | Head of flat draw, course N. E. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 103, 30 ins. in ground, and raise mound of stone, 3 ft. base, 1 ft. high, around same for corner of secs. 20, 21, 28 and 29, marked T 29 S S 21 in N. E. quadrant R 3 E S 28 in S. E. quadrant S 29 in S. W. quadrant S 20 in N. W. quadrant RESERVE in S. E. quadrant, with 4 notches on E. and 2 on S. sides, from which A pinion, 6 ins. diam., bears N. 43°30' W., 220 lks. dist., marked T 29 S R 3 E S 20 B T No other trees available. |
| | 5 ft. W. of corner raise mound of stone, 4 ft. base, 3 ft. high. |
| | Land, rolling and broken. |
| | Soil, rocky, gravelly, 4th rate. |
| | Timber, scattering pinion; yellow pine and fir and birch underbrush along pine creek in canyon. |
| | At this corner I set off 8°15' N. on declination arc and at 11 ^h 59 ^m 59 ^s l.m.t. observe sun on meridian and obtain a reading of 38°15'30" on latitude arc. |
| | From corner of secs. 20, 21, 28 and 29 I run East on random line between secs. 21 and 28,, gradually descending over rolling prairie. |
| 40.00 | Set stake for temporary 1/4 sec. corner. |
| 80.00 | Set stake for temporary corner of secs. 21, 22, 27 and 28. |
| | From corner of secs. 15, 16, 21 and 22 set by August 31st, I run |
| | S. 0°02' E. on random line between secs. 21 and 22. |
| 40.00 | Set temporary stake for 1/4 sec. corner. |
| 84.17 | Intersect extension of line east between secs. 21 and 28 4.34 chs. east of stake set for temporary sec. corner. |
| | At which intersection I set iron U. S. Forest Reserve Boundary Post No. 102, 24 ins. in ground, and raise mound of stone, 4 ft. base, 1 1/2 ft. high, around same for corner of secs. 21, 22, 27 and 28, marked T 29 S S 22 in N. E. quadrant R 3 E S 27 in S. E. quadrant S 28 in S. W. quadrant S 21 in N. W. quadrant RESERVE in N. E.; S. E. and S. W. quadrants, with 3 notches on E. and 2 on S. sides, from which A pinion, 8 ins. diam., bears S. 69°15' W., 117 lks. dist., marked RES T 29 S R 3 E S 28 B T A pinion, 8 ins. diam., bears N. 62°45' W., 192 lks. dist., marked T 29 S R 3 E S 21 B T No other trees available. |
| | Thence from corner of secs. 21, 22, 27 and 28, I run North 0°02' W. on true line, between secs. 21 and 22, over rocky prairie land, descending abruptly N. W. and S. E. |
| 23.00 | Base of 300-foot descent, bears N. E. and S. 80° W. |
| 24.70 | Pine Creek, 15 lks. wide, 10 ins. deep, course N.E. from S. 80° W.; thence over level bottom land |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 29 S., R. 3 E.

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| Chains. | covered with trachyte boulders. |
| 40.00 | Set trachyte stone 26x14x10 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face; raise mound of stone, 3 ft. base, 2 1/2 ft. high, 4 ft. W. of corner; pits impracticable. |
| 40.10 | Flat draw, 10 lks. wide, course E. |
| 43.00 | Draw, 4 lks. wide, course N. E. |
| 43.50 | Draw, 4 lks. wide, course E.; leave bottom land, begin gradual ascent, bears N. E. and S. W. |
| 53.20 | Old road, bears N. E. and S. W. |
| 57.40 | Draw, 5 lks. wide, course S. 70° E. |
| 59.00 | Top of 50-foot ridge, bears E. and W. |
| 80.00 | Draw, 15 lks. wide, course N. 80° E. |
| 81.90 | Draw, 5 lks. wide, course S. E. |
| 84.17 | Intersect corner of secs. 15, 16, 21 and 22. |
| | Land, hilly and rolling. |
| | Soil, rocky and gravelly, sandy, 4th rate. |
| | Timber, practically none. |

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| | From corner of secs. 21, 22, 27 and 28 previously described I run |
| | West on true line between secs. 21 and 28, over |
| | hilly, rocky prairie, ascending. |
| 6.30 | Top of ascent, bears N. W. and S. E., 100 ft. above sec. corner on N. end of ridge. |
| 10.30 | Begin descent, bears N. E. and S. W. |
| 34.30 | Top of east wall of canyon. |
| 40.80 | Pine Creek, 15 lks. wide, 10 ins. deep, course N. E. in 80-foot wall canyon, at base of 400-foot descent; begin ascent. |
| 42.30 | Top of W. wall of canyon, continue gradual ascent, bears N. E. and S. W. |
| 44.34 | Set trachyte stone 26x12x8 ins., 8 ins. in ground to rock, and build mound of stone, 3 1/2 ft. base. 1 ft. high, around same, for 1/4 sec. corner, marked 1/4 on N. face, from which |
| | A pinion, 10 ins. diam., bears W. 59° W., 81 lks. dist., marked 1/4 S 21 B T |
| | A pinion, 12 ins. diam., bears S. 41° E., 41 lks. dist., marked RES 1/4 S 28 B T |
| 79.80 | Flat draw, 10 lks. wide, course N. E. |
| 84.34 | Intersect corner of secs. 20, 21, 28 and 29. |
| | Land, hilly, broken and rolling. |
| | Soil, rocky and gravelly, 4th rate. |
| | Timber, occasional pinion, with pine and birch brush on Pine Creek in Canyon. |

September 1, 1904

Polaris Observation.

At corner of secs. 4, 5, 32 and 33, Tps. 29 and 30 S., R. 3 E., I set off 38°14'45" on latitude arc and 8°11'45" N. on the declination arc, and at 5 p.m., l.m.t., September 1, establish meridian with solar and mark direction thus determined by hub set 6.00 chs. N. of instrument.

I observe Polaris in accordance with Manual of Instructions at 7^h47^m p.m., l.m.t. Sep. 1.

| | |
|----------------|-----------------------------------|
| U. C. Sep. 1, | 14 ^h 41.4 ^m |
| Time of obs. | 7 47 |
| Time argument, | 6 ^h 54 ^m |

Azimuth of Polaris 1°28.3' E. of N., which angle I turn to the W. and meridian thus established agrees with p.m. solar.

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 3 E.

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| Chains | September 2: At 7 ^h a.m., l.m.t., I set off 38°14'45" on the latitude arc and 7°59' N. on the declination arc, and meridian thus established agrees with Polaris and p.m. solar meridian. |
| | Thence from corner of secs. 4, 5, 32 and 33, previously described I run N. 89°58' W. on random retracement line between secs. 5 and 32 over bottom land covered with sage brush. |
| 40.10 | Intersect N. and S. 1/4 sec. line 4 lks. S. of 1/4 sec. corner, which is cross (X) on trachyte boulder in place 3x3x2 ft. above ground, marked 1/4 N. of cross, and witnessed by a A pinion, 8 ins. diam., which bears N. 32° W., 20 lks. dist., instead of N. 62° W., 20 lks., as called for in notes of Surveyor General. A pinion, 8 ins. diam., bears S. 10° E., 18 lks. dist., marked 1/4 S 5 B T, as called for in notes above old marking on this tree I add RES. |
| | Thence from the 1/4 sec. corner I run S. 89°55' E. on true retracement line between east halves of secs. 5 and 32, through scattering pinion and cedar timber, gradually descending. |
| 2.60 | Road bears N. 30° W. and S. 30° E. |
| 14.90 | Draw, 10 lks. wide, course N. 20° E. |
| 16.00 | Base of 40-foot descent; enter creek bottom and dense underbrush, bears N. and S. |
| 20.10 | Pine Creek, 12 lks. wide, 10 ins. deep, course N. 20° W. |
| 25.80 | Pine Creek, course S. 80° W. |
| 26.40 | Pine Creek, course N. 80° W. |
| 27.20 | Pine Creek, course S. 80° W. |
| 36.00 | Pine Creek, course N. 20° W.; leave dense underbrush along creek; enter sage brush. |
| 40.10 | Intersect corner of secs. 4, 5, 32 and 33. |
| | Thence from 1/4 sec. corner between secs. 5 and 32 I run N. 89°58' W. on random retracement line, between west halves of secs. 5 and 32. |
| 40.10 | Intersect N. and S. sec. line 3 lks. N. of corner of secs. 5, 6, 31 and 32, which is a trachyte stone 10x10x20 ins. above ground, correctly marked with 5 notches on E. and 1 on W. edges, and witnessed as called for in notes of Surveyor General by A pinion-pine, 10 ins. diam., which bears N. 59° E., 7 lks. dist., marked T 29 S R 3 E S 32 B T A pinion-pine, 8 ins. diam., bears S. 26° E., 119 lks. dist., marked T 30 S R 3 E S 5 B T A pinion-pine, 8 ins. diam., bears S. 82°30' W., 17 lks. dist., marked T 30 S R 3 E S 6 B T A pinion-pine, 6 ins. diam., bears N. 73° W., 65 lks. dist., marked T 29 S R 3 E S 31 B T Above old markings on S. E. and S. W. bearing tree I add RES. |
| | Thence from the corner I run East on true retracement line between secs. 5 and 32, over stony land, through timber, ascending. |
| 1.00 | Top of ridge, bears N. and S.; begin gradual descent. |
| 33.40 | Flat draw, 10 lks. wide, course N. E. |
| 40.10 | Intersect the 1/4 sec. corner between secs. 5 and |

ACQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 3 E.

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| Chains. | <p>32 150 ft. below summit of ridge. Land, rolling and level. Soil, stony, gravelly and sandy, 4th rate. Timber, pinion pine and cedar.</p> |
| 40.03 | <p>From corner of secs. 5, 6, 31 and 32 previously described I run N. 89°58' W. on random retracement line between secs. 6 and 31, through timber descending. Intersect N. and S. 1/4 sec. line, 15 lks. S. of 1/4 sec. corner, which is a trachyte stone 10x8x10 ins. above ground, correctly marked 1/4 on N. and witnessed by mound of stone 2 ft. base, 1 1/2 ft. high N. of corner, as called for in notes of Surveyor General. Thence from this 1/4 sec. corner I run S. 89°45' E. on true retracement line between east halves of secs. 6 and 31, over rolling stony prairie land.</p> |
| 22.00 | Enter timber, bears N. and S.; begin descent, bears N. and S. |
| 32.60 | Draw, 10 lks. wide, course N. 20° E., base of 75-foot descent; begin ascent. |
| 39.97 | <p>6 lks. west of this corner I set Iron U. S. Forest Reserve Boundary Post No. 106, 10 ins. in ground to solid rock and raise mound of stone, 4 ft. base, 3 ft. high, around same for witness corner to corner of secs. 5, 6, 31 and 32, marked W C on top of cap T 29 S S 32 in N. E. quadrant R 3 E S 5 in S. E. quadrant T 30 S S 6 in S. W. quadrant S 31 in N. W. quadrant, with 5 notches on E. and 1 on W. sides.</p> |
| 40.03 | <p>Intersect corner of secs. 5, 6, 31 and 32 75 ft. above draw. Thence from 1/4 sec. corner between secs. 6 and 31 I run N. 89°58' W. on random retracement line between west halves of secs. 6 and 31.</p> |
| 39.45 | <p>Intersect N. and S. range line 11 lks. N. of corner of Tps. 29 and 30 S., Rs. 2 and 3 E., which is a trachyte stone 12x10x10 ins. above ground, correctly marked with 6 notches on N., S., E., and W. edges and witnessed as called for in notes of Surveyor General by A pinion, 10 ins. diam., which bears N. 32°30' E. 30 lks. dist., marked T 29 S R 3 E S 31 B T A pinion, 18 ins. diam., bears S. 29° E., 39 lks. dist., marked T 30 S R 3 E S 6 B T A pinion, 12 ins. diam., bears S. 86°30' W., 33 lks. dist., marked T 30 S R 2 E S 1 B T A pinion, 8 ins. diam., bears N. 28°30' W., 54 lks. dist., marked T 29 S R 2 E S 36 B T Above old markings I add RES on the S. E. and S. W. bearing trees. 5 lks. W. of this corner I set iron U. S. Forest Reserve Boundary Post No. 107 10 ins. in ground to solid rock and build mound of stone 5 ft. base 3 ft. high, around same for witness corner to corner of Tps. 29 and 30 S., Rs. 2 and 3 E., marked W C on top of cap T 29 S S 31 in N. E. quadrant R 3 E S 6 in S. E. quadrant T 30 S S 1 in S. W. quadrant, R 2 E S 36 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 6</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 3 E.

Chains. notches on N., S., E. and W. sides.
From true corner of township I run
N. 89°53' E. on true retracement line, between
secs. 6 and 31, over rolling stony land through
timber.

.45 Flat swail draw, course N. W.
12.35 Road, bears N. and S. Thurber and Dog Lake road.
13.20 Draw, 10 lks. wide, course N.
25.00 Leave timber, enter rocky prairie, bears N. and S.
39.45 Intersect the 1/4 sec. corner between secs. 6 and 31.
Land, rolling and stony.
Soil, rocky, gravelly, 4th rate.
Timber, small pinion-pine and cedar.

GENERAL DESCRIPTION.

T. 29 S., R. 3 E., is mountainous in southeast por-
tion; rolling, stony prairie in western portion.
Fremont or Dirty^{Devil} River runs through N. E. part
and valley is cultivated. Town of Thurber lies
north of river about in secs. 1 and 2, and is set-
tlement of three or four hundred people. The south-
west and central portion of township is drained by
Pine Creek, a clear fresh stream, average 12 lks.
wide and 10 ins. deep, with narrow bottom in south-
west widening into fertile bottom in secs. 22 and
15, and swampy grass land in secs. 14 and 11. The
southeast portion of township is timbered with
small pinion-pine and cedar, with some yellow pine
on benches and along Pine Creek. Local attraction
slight. Mean magnetic declination 16°40' E.

Tps. 29 and 30 S., R. 2 E.

From corner of Tps. 29 and 30 S., Rs. 2 and 3 E. pre-
viously described, I run
West on true line between secs. land 36, over roll-
ing stony land through scattering timber.
2.20 Draw in 50-foot depression, course N. Old road in
bed of draw; leave timber, enter prairie.
16.40 Draw, 10 lks. wide, in 50-foot depression, course
N. 20° E.
35.40 Swale draw, course N. 70° E.
40.00 Set trachyte stone 24x16x12 ins., 18 ins. in ground
for 1/4 sec. corner marked 1/4 on N. face, from
which
A pinion, 10 ins. diam., bears N. 76° W., 85
lks. dist., marked 1/4 S 36 B T
No other trees available.
42.00 Draw, 3 lks. wide, course S. E.
56.00 Top of rocky ridge, bears N. E. and S. W.
58.00 Begin rocky descent, bears N. 70° E. and S. 70° W.
76.30 Side hill wash, 5 lks. wide, course N.
79.70 Base of 200-foot descent, bears N. 60° E. and
S. 60° W., at draw, 20 lks. wide, course N. 60° E.
80.00 True point for corner falls on unsafe ground on
bank of draw.
80.30 Set iron U. S. Forest Reserve Boundary Post No. 108,
30 ins. in ground and build mound of stone 3 1/2 ft.
base, 1 ft. high, around same for witness corner
to corner of secs. 1, 2, 35 and 36, marked
W C on top of cap
T 29 S S 36 in N. E. quadrant
R 2 E S 1 in S. E. quadrant
T 30 S S 2 in S. W. quadrant
S 35 in N. W. quadrant,

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 3 E.

Chains. RESERVE in S. E. and S. W. quadrants, with 1 notch on E. and 5 on W. sides, from which
A pinion-pine, 14 ins. diam., bears N. 24°30' E.
516 lks. dist., marked T 29 S R 2 E S 36
B T

No other trees available.
Land, hilly and rolling, stony prairie land.
Soil, rocky and gravelly, 4th rate.
Timber, scattering pinion-pine.

From true point for corner of secs. 1, 2, 35 and 36, 30 lks. E. of W. C. I run

West on true line between secs. 2 and 35, ascending over stony prairie land.

20.00 Top of 300-foot ascent, bears N. and S.

23.00 Swale draw, course S.

40.00 Set trachyte stone 20x12x5 ins., 15 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and witnessed by mound of stone, 3 ft. base, 2 1/2 ft. high, N. of corner. Corner falls in head of swale which drains to south.

51.20 Swale draw, course S. 30° E.

77.00 Top of prairie knob.

80.00 Set iron U. S. Forest Reserve Boundary Post No. 109, 28 ins. in ground and build mound of stone, 3 1/2 ft. base, 1 ft. high, around same for corner of secs. 2, 3, 34 and 35, marked
T 29 S S 35 in N. E. quadrant
R 2 E S 2 in S. E. quadrant
T 30 S S 3 in S. W. quadrant
S 34 in N. W. quadrant
RESERVE in S. E. and S. W. quadrants, with 2 notches on E. and 4 on W. sides; 5 lks. W. of corner I build mound of stone, 5 ft. base, 3 ft. high; pits impracticable.

Land, hilly and rolling.
Soil, stony and gravelly, 4th rate.
No timber.

September 2, 1904.

September 3:

At corner of secs. 2, 3, 34 and 35, I set off 38°14'45" on latitude arc and 7°37' N. on declination arc and at 7 o'clock a.m., l.m.t., establish meridian with solar.

Thence I run

West on true line between secs. 3 and 34, over rolling stony prairie land.

40.00 Set trachyte boulder 18x16x8 ins., 12 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and raise mound of stone, 3 ft. base, 2 ft. high, N. of corner.

59.00 Road bears N. 20° E. and S. 20° W.

80.00 Set iron U. S. Forest Reserve Boundary Post No. 110, 24 ins. in ground, and build mound of stone, 3 1/2 ft. base, 1 1/2 ft. high, around same for corner of secs. 3, 4, 33 and 34, marked
T 29 S S 34 in N. E. quadrant
R 2 E S 3 in S. E. quadrant
T 30 S S 4 in S. W. quadrant
S 33 in N. W. quadrant, with 3 notches on E. and W. sides, and raise mound of stone, 4 ft. base, 3 ft. high, W. of corner.

Land, rolling and stony.
Soil, rocky and gravelly, 4th rate.
No timber.

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 2 E.

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| Chains. | From corner of secs. 3, 4, 33 and 34, I run West on true line, between secs. 4 and 33, over gently rolling rocky prairie land. |
| 13.20 | Old Road, bears N. E. and S. W. |
| 40.00 | Set trachyte stone 22x12x8 ins., 16 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and raise mound of stone 3 ft. base, 2 ft. high, N. of corner. |
| 68.50 | Swale draw, course N. 70° W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 111, 30 ins. in ground, and build mound of stone 3 1/2 ft. base, 1 ft. high, around same for corner of secs. 4, 5, 32 and 33, marked T 29 S S 33 in N. E. quadrant R 2 E S 4 in S. E. quadrant T 30 S S 5 in S. W. quadrant S 32 in N. W. quadrant, with 4 notches on E. and 2 on W. sides, and raise mound of stone, 4 ft. base, 3 ft. high W. of corner; pits impracticable. Land, rolling, stony, prairie. Soil, stony, 4th rate. No timber. |

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| | From corner of secs. 4, 5, 32 and 33 I run West on true line between secs. 5 and 32, over gently rolling, stony, prairie land. |
| 34.85 | Old road, bears N. E. and S. W. |
| 40.00 | Set trachyte stone 30x10x10 ins., 20 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and raise mound of stone, 4 ft. base, 3 ft. high, N. of corner; pits impracticable. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 112, 30 ins. in ground, and build mound of stone, 3 1/2 ft. base, 1 ft. high, around same for corner of secs. 5, 6, 31 and 32, marked T 29 S S 32 in N. E. quadrant R 2 E S 5 in S. E. quadrant T 30 S S 6 in S. W. quadrant S 31 in N. W. quadrant RESERVE in S. E. and S. W., with 5 notches on E. and 1 on W., and raise mound of stone, 4 ft. base, 3 ft. high W. of corner. Land, rolling, stony prairie. Soil, stony, 4th rate. No timber. |

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| | From corner of secs. 5, 6, 31 and 32 I run West on true line between secs. 6 and 31 over gently rolling prairie land, partially covered with trachyte boulders. |
| 8.80 | Flat draw in 30-foot depression, course N. 20° W. |
| 40.00 | Set sandstone 18x12x8 ins., 12 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face; raise mound of stone, 3 1/2 ft. Base, 2 1/2 ft. high, N. of corner. |
| 42.00 | Swale draw in 20-foot depression, course N. 20° E. |
| 76.50 | Flat swale draw, course N. 70° W. |
| 79.43 | Allowing for convergency, set iron U. S. Forest Reserve Boundary Post No. 113, for corner of tps. 29 and 30 S., Rs. 1 and 2 E., marked T 29 S S 31 in N. E. quadrant R 2 E S 6 in S. E. quadrant T 30 S S 1 in S. W. quadrant R 1 E S 36 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 6 notches on N., S., E. and W. sides, and raise mound of stone, 4 1/2 ft. base, 3 1/2 ft. high, S. of |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 2 E.

Chains

corner.
Land, rolling, stony prairie.
Soil, stony and sandy, 4th rate.
No timber.

At this township corner I set off $7^{\circ}31'$ N. on declination arc and at $11^h59^m21^s$ l.m.t., observe sun on meridian and obtain reading of $38^{\circ}14'45''$ on latitude arc.

GENERAL DESCRIPTION.

Tps. 29 and 30 S., R. 2 E., is high rolling prairie plateau, stony and gravelly, partially covered with small growth of yellow sage; very little grass. Drainage flows N. E. No water in townships; some timber in southeast portion of T. 30 S., R. 2 E. Some local attraction on lines run. Magnetic declination $16^{\circ}45'$ E.

Tps. 29 and 30 S., R. 1 E.

From corner of Tps. 29 and 30 S., Rs. 1 and 2 E., I run

West on true line between secs. 1 and 36, over gently rolling prairie land.

11.10 Flat draw, course N. 20° W.

40.00 Set sandstone $18 \times 12 \times 10$ ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, and erect mound of stone, $3\frac{1}{2}$ ft. base, 2 ft. high, N. of corner; pits impracticable.

67.20 Draw, 10 lks. wide in 20-foot depression, course N. W.

80.00 Set iron U. S. Forest Reserve Boundary Post No. 114, 30 ins. in ground, and build mound of stone $3\frac{1}{2}$ ft. base, 1 ft. high, around same for corner of secs. 1, 2, 35 and 36, marked
T 29 S S 36 in N. E. quadrant
R 1 E S 1 in S. E. quadrant
T 30 S S 2 in S. W. quadrant
S 35 in N. W. quadrant
RESERVE in S. E. and S. W. quadrants, with 1 notch on E. and 5 on W. sides, witnessed by mound of stone, $4\frac{1}{2}$ ft. base, 3 ft. high, W. of corner.
Land, rolling and stony prairie.
Soil, gravelly and sandy, 4th rate.
No timber.

From corner of secs. 1, 2, 35 and 36, I run West on true line between secs. 2 and 35, over gently rolling rocky prairie.

13.60 Dry branch, 20 lks. wide, course N. E., rocky bottom and in 40-foot depression.

40.00 Set trachyte stone $26 \times 12 \times 10$ ins., 18 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, and raise mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, N. of corner; pits impracticable.

71.00 Begin ascent, bears N. and S.

80.00 Set iron U. S. Forest Reserve Boundary Post No. 115, 28 ins. in ground and raise mound of stone, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, around same for corner of secs. 2, 3, 34 and 35, marked
T 29 S S 35 in N. E. quadrant
R 1 E S 2 in S. E. quadrant
T 30 S S 3 in S. W. quadrant
S 34 in N. W. quadrant

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 1 E.

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| Chains. | Reserve in S. E. and S. W., with 2 notches on E., and 4 on W. sides, and raise mound of stone, 4 ft. base, 3 ft. high, W. of corner. Corner falls on top of 90-foot step, bearing N. and S. Land, rolling and hilly. Soil, stony and gravelly and sandy, 4th rate. No timber. |
| 40.00 | From corner of secs. 2, 3, 34 and 35, I run West on true line between secs. 3 and 34, over gently rolling stony prairie. Set trachyte stone 24x12x10 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and raise mound of stone, 3 ft. base, 2 ft high, N. of corner. |
| 78.00 | Begin ascent, bears N. and S. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 116, 24 ins. in ground, and build mound of stone, 3 1/2 ft. base, 1 1/2 ft. high, around same for corner of secs. 3, 4, 33 and 34, marked T 29 S S 34 in N. E. quadrant R 1 E S 3 in S. E. quadrant T 30 S S 4 in S. W. quadrant S 33 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 3 notches on E. and W. sides, and raise mound of stone, 4 ft. base, 3 ft. high, W. of corner. Land, rolling stony prairie. Soil, rocky and gravelly, 4th rate. No timber. |
| 39.00 | From corner of secs. 3, 4, 33 and 34, I run West on true line between secs. 4 and 33, over gently rolling rocky prairie, gradually ascending. Top of ridge, 150 ft. above sec. corner, bears N. and S. 20° E. |
| 40.00 | Set trachyte stone 24x12x10 ins., 18 ins. in ground, for 1/4 sec. corner, marked 1/4 on N. face, and raise mound of stone 3 1/2 ft. base, 2 1/2 ft. high, N. of corner. |
| 51.00 | Enter bed of dry lake, bears N. and S.; prairie dog town along east bank. |
| 70.00 | Leave bed of dry lake, bears N. and S.; extends about 8 chs. S. and 10 chs. N.; flat bottom and shore line gives evidence of about 2 ft. depth of water in wet weather; drains to S. at S. W. corner of lake. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 117 12 ins. in ground to rock and build mound of stone, 4 ft. base, 2 1/2 ft. high, around same for corner of secs. 4, 5, 32 and 33, marked T 29 S S 33 in N. E. quadrant R 1 E S 4 in S. E. quadrant T 30 S S 5 in S. W. quadrant S 32 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 4 notches on E. and 2 on W. sides, and raise mound of stone, 4 ft. base, 3 ft. high, W. of corner, pits impracticable. Land, rolling and level. Soil, rocky and sandy, 4th rate. No timber. |

September 3, 1904

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AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 1 E.

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| Chains. | September 4: At corner of secs. 4, 5, 32 and 33, I set off 38°14'45" on latitude arc and 7°15' N. on the declination arc, and at 7 a.m., l.m.t., establish meridian with the solar. Thence I run West on true line between secs. 5 and 32 over gently rolling prairie in flat cave. |
| 20.00 | Flat draw, 10 lks. wide, course S. E. |
| 27.00 | Begin ascent, bears N. W. and S. E. |
| 32.00 | Top of 80-foot prairie bench, bears N. W. and S. E. |
| 40.00 | Set sandstone 20x8x4 ins., 15 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, and build mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, N. of corner; pits impracticable. |
| 50.00 | Begin ascent, bears N. and S. |
| 61.00 | Top of 50-foot ascent on south end of spur, bearing N. |
| 76.50 | Swale draw, course S. E. |
| 77.80 | Enter aspen grove, bears N. and S., extends 2.00 chs. N. and 1.00 ch. S.; begin ascent, bears N. and S. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 118, 30 ins. in ground, and build mound of stone, 3 ft. base, 1 ft. high, around same, for corner of secs. 5, 6, 31 and 32, marked T 29 S S 32 in N. E. quadrant R 1 E S 5 in S. E. quadrant T 30 S S 6 in S. W. quadrant S 31 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 5 notches on E. and 1 on W. sides, from which An aspen, 6 ins. diam., bears N. 22° E., 41 lks. dist., marked T 29 S R 1 E S 32 B T An aspen, 5 ins. diam., bears S. 46° E., 56 lks. dist., marked RES T 30 S R 1 E S 5 B T An aspen, 10 ins. diam., bears S. 20°15' W., 26 lks. dist., marked RES T 30 S R 1 E S 6 B T An aspen, 12 ins. diam., bears N. 38°30' W., 73 lks. dist., marked T 29 S R 1 E S 31 B T Land, rolling and stony. Soil, rocky and sandy, 4th rate. Small grove of aspen timber, no other timber. |
| <hr/> | |
| | From corner of secs. 5, 6, 31 and 32 I run West on true line between secs. 6 and 31, ascending through aspen grove. |
| 2.00 | Leave aspen grove, enter rocky prairie, bears N. W. and S. E. |
| 3.50 | Top of ascent on spur, bears N. W. and S. E., 50 ft. above sec. corner. |
| 17.00 | Draw, 10 lks. wide, course S. 60° E., in 40-foot depression. |
| 27.45 | Intersect Salt Lake Meridian 5.98 chs. S. of corner of townships 29 and 30 S., Rs. 1 E. and 1 W., which is a trachyte or granite stone 12x6x6 ins. above ground firmly set and marked with 6 notches on N., S., E. and W. faces; does not contain marks S L M, as called for in notes. I build mound of stone, 4 ft. base, 3 ft. high, S. of this corner, as it has no other witness marks. At point of intersection of my line with S. L. M., I set iron U. S. Forest Reserve Boundary Post No. 119, 30 ins. in ground and build mound of stone, 3 ft. base, 1 ft. high, around same for |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 29 and 30 S., R. 1 E.

Chains. C. C. of Tps. 29 and 30 S., R. 1 E., marked:
C C on top of cap E. of center
T 29 S S 31 in N. E. quadrant
T 30 S R 1 E S 6 in S. E. quadrant
RESERVE in S. E. quadrant, with 6 notches on
N., E. and S. sides, and build mound of stone,
6 ft. base, $4\frac{1}{2}$ ft. high, E. of corner; pits im-
practicable.

GENERAL DESCRIPTION.

T. 29 S., R. 1 E., is high rolling prairie plateau,
with occasional aspen grove in western portion.
Is covered with small growth of yellow sage and
some little grass; drainage is to east and north-
east; no water in township. Some local attrac-
tion on line run. Mean magnetic declination
16°20' E.

SALT LAKE MERIDIAN THROUGH T. 30 S.

From corner of Tps. 29 and 30 S., R. 1 W., on Salt
Lake Meridian, which is a trachyte or granite
stone 12x6x6 ins. above ground, as previously
described.

Thence I run

South on a true line between Rs. 1 E. and 1 W.,
over rolling prairie.

5.98 C. C. of Tps. 29 and 30 S., R. 1 E., as set by me
to-day.

15.00 Begin ascent, bears N. W. and S. E.

20.00 Top of 80-foot ascent, bears N. W. and S. E.

24.00 Enter aspen grove, bears E. and W.

30.00 Leave grove, enter prairie, bears N. 20° W. and
S. 20° E.

Difference between measurements of 40.00 chs. by
two sets of chainmen is 3 lks.; position of
middle point

By 1st set, 39.98 chs.

By 2nd set, 40.02 chs., the mean of which is

40.00 Set trachyte stone 20x14x6 ins., 15 ins. in ground
for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, with
mound of stone, 3 ft. base, 2 ft. high, W. of
corner; pits impracticable.

44.00 Begin descent, bears N. W. and S. E.

58.50 Base of 50-foot descent in swale draw, course S. E.

71.00 Begin descent, bears E. and W.

77.50 Base of 40-foot descent, at draw, 15 lks. wide,
course N. 80° E.; begin ascent.

Difference between measurements of 80.00 chs. by two
sets of chainmen is 1 lk; position of middle
point

By 1st set, 79.99 $\frac{1}{2}$

By 2nd set, 80.00 $\frac{1}{2}$, the mean of which is

80.00 Set iron U. S. Forest Reserve Boundary Post No. 120.

20 ins. in ground to rock, and build mound of
stone, 4 ft. base, 2 ft. high, around same for
corner of secs. 1, 6, 7 and 12, marked

T 30 S S 6 in N. E. quadrant

R 1 E S 7 in S. E. quadrant

S 12 in S. W. quadrant

R 1 W S 1 in N. W. quadrant

RESERVE in N. E. and S. E. quadrants, with 5
notches on S. and 1 on N. sides, from which

An aspen, 8 ins. diam., bears S. 20°15' W., 218
lks. dist., marked T 30 S R 1 W S 12 B T.

No other trees available.

I build mound of stone, 4 ft. base, 3 ft. high, W.

AQUARIUS FOREST RESERVE BOUNDARY.

Salt Lake Meridian, through T. 30 S.

| | |
|---------|---|
| Chains. | <p>of corner Land, rolling rocky prairie. Soil, stony and gravelly, 4th rate. Occasional groves of aspen timber in heads of draws and on steepest slopes.</p> <p style="text-align: right;">September 4, 1904.</p> |
| | <p>September 5: At corner of secs. 1, 6, 7 and 12, T. 30 S., R. 1 W., I set off 38°14' on latitude arc and 6°53' N. on the declination arc and at 6^h58^m45^s a.m., l.m.t., establish meridian with solar.</p> <p>Thence I run South on a true line on Salt Lake Meridian between secs. 7 and 12, over rolling prairie ascending.</p> |
| 15.00 | <p>Top of gradual ascent, bears E. and W., 100 ft. above sec. corner. Difference between measurements of 40.00 chs. by 2 sets of chainmen is 2 lks; position of middle point By 1st set, 39.99 By 2nd set, 40.01, the mean of which is</p> |
| 40.00 | <p>Set trachyte stone 28x12x4 ins., 18 ins. in ground for $\frac{1}{2}$ sec. corner, marked $\frac{1}{2}$ on W. face, with mound of stone, 3 ft. base, 2 ft. high, on W. of corner. Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks.; position of middle point By 1st set, 80.01 chs. By 2nd set, 79.99, the mean of which is</p> |
| 80.00 | <p>Set iron U. S. Forest Reserve Boundary Post No. 121, 12 ins. in ground to solid rock, and build mound of stone, 4 ft. base, 2$\frac{1}{2}$ ft. high, around same for corner of secs. 7, 12, 13 and 18, marked T.30 S., S 7 in N. E. quadrant R 1 E S 18 in S. E. quadrant S 13 in S. W. quadrant R 1 W S 12 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 4 notches on S. and 2 on N. sides, and raise mound of stone, 4 ft. base, 3 ft. high, W. of corner. Land, rolling, rocky prairie. Soil, rocky, 4th rate. No timber.</p> |
| | <p>From corner of secs. 7, 12, 13 and 18, I run South on a true line on Salt Lake Meridian between secs. 13 and 18, over gently rolling rocky prairie land.</p> |
| 20.60 | Enter aspen grove, bears N. E. and W. |
| 29.00 | Head of swale, drains to S. E.; leave aspen grove bears N. E. and W. |
| 36.00 | Rocky east nose of ridge. Difference between measurements of 40.00 chs. by two sets of chainmen is 2 lks.; position of mid- dle point By 1st set, 40.01 chs. By 2nd set, 39.99 chs.; the mean of which is |
| 40.00 | <p>Set trachyte stone 26x14x10 ins., 18 ins. in ground for $\frac{1}{2}$ sec. corner, marked $\frac{1}{2}$ on W. face, with mound of stone, 4 ft. base, 3 ft. high, W. of corner. Difference between measurements of 80.00 chs. by two sets of chainmen is 3 lks.; position of middle point</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

Salt Lake Meridian, T. 30 S.

| | |
|--------|--|
| Chains | By 1st set, 79.99 chs. |
| 80.00 | By 2nd set, 80.02 chs., the mean of which is Set iron U. S. Forest Reserve Boundary Post No. 122, 20 ins. in ground to rock, and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 13, 18, 19 and 24, marked T 30 S S 18 in N. E. quadrant R 1 E S 19 in S. E. quadrant S 24 in S. W. quadrant R 1 W S 13 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 3 notches on N. and S. sides, with mound of stone, 4 ft. base, 4 ft. high, W. of corner. Land, rolling and level. Soil, rocky and gravelly, 4th rate. No timber. |
| 40.00 | From corner of secs. 13, 18, 19 and 24, I run South on a true line on Salt Lake Meridian between secs. 19 and 24 over gently rolling prairie. Difference between measurements of 40.00 chs. by two sets of chainmen is nothing. Set trachyte stone 24x14x8 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, with mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner. |
| 58.00 | Swale drains S. E. Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks.; position of middle point |
| 80.00 | By 1st set, 79.99 chs. By 2nd set, 80.01 chs.; the mean of which is Set iron U. S. Forest Reserve Boundary Post No. 123 on solid rock, cut cross (\boxplus) on rock with 2 notches on S. and 4 on N. of cross, over which I set iron post and build mound of stone, 6 ft. base, $3\frac{1}{2}$ ft. high, around same for corner of secs. 19, 24, 25 and 30, marked T 30 S S 19 in N. E. quadrant R 1 E S 30 in S. E. quadrant S 20 in S. W. quadrant R 1 W S 24 in N. W. quadrant RESERVE in S. E. and N. E. quadrants, with 2 notches on S. and 4 on N. sides; mound of stone 4 ft. base, 3 ft. high, W. of corner. Land, rolling, rocky prairie. Soil rocky and gravelly, 4th rate. No timber. |
| | At this corner I set off $6^{\circ}46'45''^N$ on declination arc and at $11^h58^m42^s$ l.m.t., observe sun on meridian and obtain a reading of $38^{\circ}11'$ on latitude arc. |
| 40.00 | From corner of secs. 19, 24, 25 and 30, I run South on a true line on Salt Lake Meridian between secs. 25 and 30, over rolling rocky prairie. Difference between measurements of 40.00 chs. by two sets of chainmen is 1 lk. Position of middle point By 1st set, $39.98\frac{1}{2}$ chs. By 2nd set, $40.01\frac{1}{2}$ chs.; the mean of which is Set trachyte 18x10x8 ins., 12 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, with mound of stone, $3\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, W. of corner. |

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AQUARIUS FOREST RESERVE BOUNDARY.

Salt Lake Meridian, T. 30 S.

| | |
|---------|---|
| Chains. | |
| 50.80 | Rocky draw, 10 lks. wide, course S. 70° E., in 30-foot depression. Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks.; position of middle point By 1st set, 79.99 chs. By 2nd set, 80.01 chs.; the mean of which is |
| 80.00 | Set iron U.S. Forest Reserve Boundary Post No. 124 18 ins. in ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 25, 30, 31 and 36, marked T 30 S S 30 in N. E. quadrant R 1 E S 31 in S. E. quadrant S 36 in S. W. quadrant R 1 W S 25 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 5 notches on N. and 1 on S. sides; with mound of stone, 4 ft. base, 3 ft. high, W. of corner. Land, rolling, rocky prairie. Soil, rocky and gravelly, 4th rate. No timber. |
| 3.60 | From corner of secs. 25, 30, 31 and 36 I run South on a true line on Salt Lake Meridian between secs. 31 and 36, over gently rolling prairie. |
| 20.00 | Draw, 15 lks. wide, course N. E. The magnetic needle swings to 25° E. of N., showing presence of iron. |
| 38.00 | Needle swings back to 13°02' E. Difference between measurements of 40.00 chs by two sets of chainmen is 3 lks.; position of middle point By 1st set, 40.02 chs. By 2nd set, 39.98 chs.; the mean of which is |
| 40.00 | Set trachyte stone 22x16x6 ins., 15 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, with mound of stone, 3 $\frac{1}{2}$ ft. base, 2 $\frac{1}{2}$ ft. high, W. of corner. |
| 60.00 | Flat swale drains to E. Difference between measurements of 80.00 chs. by two sets of chainmen is nothing. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 125 24 ins. in ground, and build mound of stone, 4 ft. base, 1 $\frac{1}{2}$ ft. high, around same for corner of Tps. 30 and 31 S., Rs. 1 E. and 1 W., marked T 30 S S 31 in N. E. quadrant R 1 E S 6 in S. E. quadrant T 31 S S 1 in S. W. quadrant R 1 W S 36 in N. W. quadrant RESERVE in N.E., S.E. and S. W. quadrants, with 6 notches on N., S., E. and W. sides, from which A lone aspen, 8 ins. diam., in rocky swale, bears S. 24°15' E., 697 lks. dist., marked RES T 31 S R 1 E S 6 B T No other trees available. I build mound of stone, 4 ft. base, 3 ft. high, south of corner. Land, rolling rocky prairie. Soil, rocky and gravelly, 4th rate. No timber. |

September 5, 1904.

GENERAL DESCRIPTION.

T. 30 S., R. 1 E., is high rolling prairie plateau, with occasional aspen groves in western portion; Drains to east and northeast; no water in town-

Sixth Standard Parallel S., through R. 1 W.

Chains. ship. There is a lake called Pollywog Lake in Sec. 14, T. 30 S., R. 1 W., of about 5 acres, though nearly dry at this time, water is muddy and stagnant, though it affords watering place for wild horses. Much local attraction on line run, and secs. 31 and 36 give evidence of large body of iron near surface. Mean magnetic declination 14°00' E.

September 6: At corner of Tps. 30 and 31 S., Rs. 1 E. and 1 W., I set off 38°09'30" on latitude arc and 6°30'30" N. on declination arc, and at 6^h58^m30^s a.m., L.M.T., determine meridian with solar.

Thence I run

West on random line on Sixth Standard Parallel over rolling rocky prairie land, setting stakes for temporary $\frac{1}{4}$ sec. corners and sec. corners at intervals of 40 and 80 chs.

471.94 Intersect N. and S. range line 28.45 chs. N. 0°43'E. of standard corner of T. 30 S., Rs. 1 and 2 W., which is a trachyte 6x6x6 ins. above ground, marked with 6 notches on N., E. and W. faces, and witnessed as described in notes of General Land Office.

Note: The bearing of N. 0°43' E. is obtained by setting C. C. on line between township corner and $\frac{1}{4}$ sec. corner on east boundary of sec. 36, the distance between which is 40.16 chs., by retracement.

At intersection of my line with N. and S. range line I set trachyte stone 26x14x8 ins., 6 ins. in ground to solid rock and build mound of stone 3 ft. base, 1 $\frac{1}{2}$ ft. high, around same for C. C. of south boundary of T. 30 S., R. 1 W., marked C C on E. face, with 6 notches on N. and E. faces, from which

A pinion, 10 ins. diam., bears N. 61° E., 35 lks. dist., marked C C, T. 30 S., R. 1 W., S 31 B T;

Raise mound of stone, 4 ft. base, 4 ft. high E. of corner.

September 6, 1904.

September 7: Thence from C. C. of south boundary of T. 30 S., R. 1 W., on west boundary of township, I run

East on true line along south boundary of sec. 31, through timber, ascending.

9.00 Top of gradual ascent, 80 ft. above C. C.

14.00 Begin abrupt descent, bears N. W. and S. E.

Difference between measurements of 31.94 chs. by two sets of chainment is 10 lks.; position of middle point

By 1st set, 31.99 chs.

By 2nd set, 31.89 chs.; the mean of which is

31.94 Set trachyte stone 22x14x12 ins., 12 ins. in ground for $\frac{1}{4}$ standard corner, marked $\frac{1}{4}$ S C on N. face, from which

A pinion, 10 ins. diam., bears N. 44°30' E., 17 lks. dist., marked S C $\frac{1}{4}$ S 31 B T

A pinion, 10 in. diam., bears N. 45°45' W., 75 lks. dist., marked S C $\frac{1}{4}$ S 31 B T

37.00 Leave thick timber, enter scattering timber, on nearly bare rocky surface.

39.00 Draw, 10 lks. wide, course S. 20° E., at base of 400-foot descent.

47.00 Canyon draw, 10 lks. wide, course S.; begin abrupt rocky ascent.

54.40 Top of 200-foot ascent on ridge, bears N. and S.

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., through R. 1 W.

| | |
|---------|---|
| Chains. | |
| 57.90 | Begin abrupt descent, bears N. and S. |
| 65.00 | Draw, 10 lks. wide, at base of 300-foot descent, course S.; begin abrupt ascent, over bare slide. |
| 70.50 | Top of 250-foot ascent, on ridge bears N. and S. Difference between measurements of 71.94 chs. by two sets of chainmen is 6 lks.; position of middle point By 1st set, 71.91 chs. By 2nd set, 71.97 chs.; the mean of which is |
| 71.94 | Set trachyte stone 20x12x10 ins., 15 ins. in ground for standard corner of secs. 31 and 32, marked S. C. on N., 5 notches on E. and 1 on W. faces, from which A pinion, 6 ins. diam., bears N. 60°15' E., 15 lks. dist., marked S C T 30 S R 1 W S 32 B T A red fir, 14 ins. diam., bears N. 38°15' W., 87 lks. dist., marked S C T 30 S R 1 W S 31 B T Land, mountainous and precipitous. Soil, rocky and bare slide rock and dirt, 4th rate. Timber, pinion-pine, cedar and fir. September 7, 1904. |
| <hr/> | |
| | September 6: From S. C. of secs. 31 and 32 I run East on true line along south boundary of sec. 32, through timber, descending. |
| 12.00 | Draw, 10 lks. wide, course S., at base of 300-foot descent; begin ascent. |
| 18.00 | Top of 100-foot ascent, bears N. and S. E. on S. slope of ridge. |
| 20.00 | Begin abrupt descent, bears N. E. and S. W. |
| 32.00 | Base of 200-foot descent, bears N. E. and S. W. |
| 32.40 | Draw, 10 lks. wide, course S. |
| 37.00 | Dry branch, 20 lks. wide, 8 ft. banks, course S.W. |
| 37.50 | Begin abrupt ascent, bears N. E. and S. W. The difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks.; position of middle point By 1st set, 40.04 chs.; By 2nd set, 39.96 chs.; the mean of which is |
| 40.00 | True point for $\frac{1}{4}$ sec. corner falls on slide dirt. |
| 40.60 | Set trachyte stone 16x12x 3 ins. 12 ins. in ground for witness corner to $\frac{1}{4}$ standard sec. corner, marked W C $\frac{1}{4}$ S C on E. face, from which A pinion, 10 ins. diam., bears N. 84°30' E., 45 lks. dist., marked W C S C $\frac{1}{4}$ S 32 B T A pinion, 12 ins. diam., bears N. 5°30' W., 127 lks. dist., marked W C S C $\frac{1}{4}$ S 32 B T |
| 53.00 | Top of 400-foot ascent, bears N. E. and S. W. |
| 54.00 | Begin descent, bears N. W. and S. E. |
| 58.00 | Base of 90-foot descent at ravine, 10 lks. wide,, course N. 30° W.; begin abrupt ascent. |
| 63.00 | Top of abrupt ascent, continue gradual ascent, bears N. and S. Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks.; position of middle point By 1st set, 79.96 chs. By 2nd set, 80.04 chs.; the mean of which is |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 129 18 ins. in ground to rock, and build mound of stone, 4 ft. base, 2 ft. high, around same for standard corner of secs. 32 and 33, marked S C on top of cap N. of center, T 30 S S 33 in N. E. quadrant R 1 W S 32 in N. W. quadrant |

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AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., R. 1 W.

| | |
|---------|---|
| Chains. | <p>RESERVE in S. E. and S. W. quadrants, with 4 notches on E. and 2 on W. sides, from which</p> <p>A cedar, 14 ins. diam., bears N. 20°30' E., 106 lks. dist., marked S C T 30 S R 1 W S 33 B T</p> <p>A pinion, 12 ins. diam., bears N. 71°45' W., 55 lks. dist., marked S C T 30 S R 1 W S 32 B T</p> <p>Corner falls on N. side of hill 500 ft. above ravine.</p> <p>Land, mountainous.</p> <p>Soil, rocky and gravelly, 4th rate.</p> <p>Timber, pinion, cedar and some yellow pine.</p> |
| 7.50 | <p>From standard corner of secs. 32 and 33 I run East on true line along south boundary of sec. 33, through scattering timber along N. side of hill.</p> <p>Spring brook, 1 lk. wide, 1 in. deep, course N.W., water dries up before it reaches foot of hill; dense birch brush along creek,</p> |
| 17.85 | <p>Spring brook, 1 lk. wide, $\frac{1}{2}$ in. deep, course N.W. Leave scattering timber, enter prairie and begin ascent.</p> |
| 39.00 | <p>Top of 100-foot ascent, bears N. E. and S. W. Difference between measurements of 40.00 chs. by two sets of chainmen is 6 lks.; position of middle point</p> <p>By 1st set, 40.03 chs.</p> <p>By 2nd set, 39.97 chs.; the mean of which is</p> |
| 40.00 | <p>Set trachyte stone 22x12x6 ins., 15 ins. in ground for ^{standard} corner, marked $\frac{1}{4}$ S C on N. face, with mound of stone, 3$\frac{1}{2}$ ft. base, 2$\frac{1}{2}$ ft. high, N. of corner; pits impracticable.</p> |
| 43.50 | <p>Draw, 10 lks. wide, course N. W.; begin ascent.</p> |
| 55.00 | <p>Top of 100-foot ascent, bears N. and S. Begin descent, bears N. and S.</p> |
| 58.00 | <p>Base of 40-foot descent at swale. Draw, 10 lks. wide, course N. W.; begin ascent.</p> |
| 75.00 | <p>Top of 200-foot ascent, bears N. and S.; thence over rolling sage brush bench.</p> <p>Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks.; position of middle point</p> <p>By 1st set, 80.04 chs.</p> <p>By 2nd set, 79.96 chs.; the mean of which is</p> |
| 80.00 | <p>The point for sec. corner falls on solid rock flush with surface of ground, at which point I cut cross (+) and mark S C N., three notches E. and W. of cross, over which I set iron U. S. Forest Reserve Boundary Post No. 128 in mound of stone, 5 ft. base, 3$\frac{1}{2}$ ft. high, for standard corner of secs. 33 and 34, marked</p> <p>S C on top of cap N. of center</p> <p>T 30 S S 34 in N. E. quadrant</p> <p>R 1 W S 33 in N. W. quadrant</p> <p>RESERVE in S. E. and S. W. quadrants, with 3 notches on E. and W. sides, and build mound of stone, 3$\frac{1}{2}$ ft. base, 2$\frac{1}{2}$ ft. high, N. of corner; pits impracticable.</p> <p>Land, mountainous and rolling benches.</p> <p>Soil, rocky, 4th rate.</p> <p>Timber, occasional pinion and cedar tree.</p> |
| 14.00 | <p>From standard corner of secs. 33 and 34 I run East on true line along S. boundary of sec. 34, over rolling rocky slope sage brush bench.</p> <p>Begin ascent, bears N. and S.; enter timber, bears</p> |

Sixth Standard Parallel S., R. 1 W.

| | |
|---------|---|
| Chains. | N. and S., small pine and mountain mahogany. |
| 35.20 | Top of precipitous rocky ascent, 650 ft. high, bears N. and S. |
| 35.22 | Set flag pole in mound of stone for line marking. Leave timber, enter rocky prairie plateau. |
| 39.50 | Enter aspen grove, bears N. and S. Difference between measurements of 40.00 chs. by two sets of chainmen is 12 lks.; position of middle point By 1st set, 40.06 chs. By 2nd set, 39.94 chs.; the mean of which is |
| 40.00 | Set trachyte stone 20x12x6 ins., 15 ins. in ground for $\frac{1}{4}$ standard corner, marked $\frac{1}{4}$ S C on N. face, from which An aspen, 10 ins. diam., bears N. $4^{\circ}30'$ E., 53 lks. dist., marked S C $\frac{1}{4}$ S 34 B T An aspen, 8 ins. diam., bears N. $14^{\circ}30'$ W., 43 lks. dist., marked S C $\frac{1}{4}$ S 34 B T |
| 40.10 | Leave aspen grove, enter prairie, bears N. and S. |
| 49.50 | Leave prairie, enter aspen grove, bears N. and S. |
| 52.00 | Leave aspens, enter prairie, bears N. 20° E. and S. E. |
| 60.50 | Leave prairie, enter aspens, bears N. and S. E. |
| 65.00 | Summit of divide bears N. and S. on gently rolling plateau. |
| 77.00 | Leave aspen grove, enter rolling prairie, bears N. and S. Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks.; position of middle point By 1st set, 79.98 chs. By 2nd set, 80.02 chs.; the mean of which is |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post. NO. 127, 10 ins. in ground to solid rock and build mound of stone, 4 ft. base, 3 ft. high, around same for standard corner of secs. 34 and 35, marked S C on top of cap N. of center T 30 S S 35 in N. E. quadrant R 1 W S 34 in N. W. quadrant RESERVE in S. E. and S. W. quadrants, with 2 notches on E. and 4 on W. sides, from which An aspen, 8 ins. diam., bears N. $46^{\circ}30'$ W., 240 lks. dist., marked S C T 30 S R 1 W S 34 B T An aspen, 10 ins. diam., bears N. $30^{\circ}15'$ E., 321 lks. dist., marked S C T 30 S R 1 W S 35 B T Land, mountainous and rolling. Soil, rocky and gravelly, 4th rate. Timber, aspen, piñon-pine and mountain mahogany. |
| 4.00 | From standard corner of secs. 34 and 35 I run East on true line along south boundary of sec. 35 over rolling prairie, gradually descending. Leave prairie, enter aspen grove, bears N.W. and S.E. |
| 15.20 | Leave aspens, enter prairie, bears N.E. and S.E. |
| 19.20 | Fence N. E. to S. W. |
| 19.90 | Fence N. W. and S. E. around sheep corral, 2 chs. square. |
| 30.00 | Base of 100-foot gradual descent, bears N.W. and S.E. Difference between measurements of 40.00 chs. by two sets of chainmen is 3 lks.; position of middle point By 1st set, 39.98 chs. By 2nd set, 40.02 chs.; the mean of which is |

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., R. 1 W.

Chains.

40.00 Set granite 20x10x6 ins., 14 ins. in ground, for $\frac{1}{4}$ standard corner, marked S C $\frac{1}{4}$ on N. face and raise mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high, N. of corner; pits impracticable.

68.00 Swale draw, course S. 20° E.
Difference between measurements of 80.00 chs. by two sets of chainmen is 2 lks.; position of middle point

By 1st set, 80.01 chs.

By 2nd set, 79.99 chs.; the mean of which is

80.00 Set iron U. S. Forest Reserve Boundary Post No. 126, 12 ins. in ground to solid rock and build mound of stone, $4\frac{1}{2}$ ft. base, $2\frac{1}{2}$ ft. high, around same for standard corner of secs. 35 and 36, marked S C on top of cap N. of center

T 30 S S 36 in N. E. quadrant

R 1 W S 35 in N. W. quadrant

RESERVE in S. E. and S. W. quadrants, with 1

notch on E. and 5 on W. sides, and raise mound of stone, $2\frac{1}{2}$ ft. base, 2 ft. high, N. of corner.

Land, rolling plateau.

Soil, rocky, gravelly, 4th rate.

Timber, aspen or quaking asp in groves.

September 6, 1904.

From standard corner of secs. 35 and 36 I run East on true line along south boundary of sec. 36 over rolling rocky prairie.

Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks.; position of middle point

By 1st set, 40.02 chs.

By 2nd set, 39.98 chs.; the mean of which is

40.00 Set trachyte stone 18x8x6 ins., 12 ins. in ground for standard $\frac{1}{4}$ sec. corner marked S C $\frac{1}{4}$ on N. face, and raise mound of stone $2\frac{1}{2}$ ft. base, 2 ft. high, N. of corner; pits impracticable.

Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks.; position of middle point

By 1st set, 79.98 chs.

By 2nd set, 80.02 chs., the mean of which is

80.00 Intersect corner of Tps. 30 and 31 S., R. 1 E. and 1 W. on Salt Lake Meridian, set by me September 5, as previously described.

Land, rolling plateau.

Soil, rocky and gravelly.

No timber.

September 5, 1904.

September 9: Polaris observation: At camp near corner of secs. 19, 24, 25 and 30, T. 31 S., Rs. 1 and 2 W., latitude 38°05'30", I set off 38°05'30" on latitude arc and 5°13'30" N. on declination arc and at 4^h57^m30^s p.m., l.m.t., and establish meridian with the solar and mark direction thus determined by hub driven at 6.00 chs. dist.

With instrument unmoved I observe Polaris in accordance with Manual instructions at 9^h12^m p.m., l.m.t., and mark direction thus determined by hub at 6.00 chs. dist.

AQUARIUS FOREST RESERVE BOUNDARY.

Sixth Standard Parallel S., R. 1 W.

| | | |
|---------|--|-----------------------------------|
| Chains. | U. C. Sep. 1, 1904, | 14 ^h 41.4 ^m |
| | Reduction to Sep. 9, | 31.4 |
| | U. C. Sep. 9 | 14 ^h 10 ^m |
| | Time of observation Sep. 9, | 9 1 ^h |
| | Time argument, | 4 ^h 58 ^m |
| | Azimuth Polaris at observation = 1°28'15" E. | |
| | September 10: | |
| | At 6 ^h 45 ^m a.m., I turn off the azimuth of Polaris 1°28'15" to the left and find meridian thus determined agrees with that established by solar observation yesterday P/M. | |
| | I set off 38°05'15" on latitude arc and 5°00'30" N. on declination arc and at 6 ^h 57 ^m a.m., l.m.t., establish meridian with solar and find same agrees with previously established meridian. | |
| | Tps. 31 and 32 S., R. 1 W. | |
| | At corner of Tps. 31 and 32 S., Rs. 1 and 2 W., which is a trachyte 10x8x6 ins. above ground, marked with 6 notches on 4 edges, firmly set in ground with small mound of stone W. of corner and witnessed by a | |
| | A pinion 10 ins. diam., which bears N. 21°30' W., 38 lks. dist., instead of N. 10° W., 50 lks. dist., as called for in notes of General Land Office, which bearing tree is improperly marked T 32 S, etc. I re-mark same | |
| | T 31 S R 2 W S 36 B T. | |
| | I set off 38°04' on latitude arc and 4°58'30" N. on declination arc and at 8 o'clock a.m., l.m.t., establish meridian with solar. | |
| | Thence I run | |
| | East on true line between secs. 6 and 31, through scattering timber, over rolling surface. | |
| 4.00 | Head of open hollow draw, course N. 20° W. | |
| 22.00 | Head of open hollow draw, course N. | |
| 24.25 | Road, bears N. 20° W. and S. 20° W. | |
| 30.00 | Old road, bears N. and S. 20° W. | |
| 33.65 | Draw, 5 lks. wide, course N. Leave scattering timber, enter open flat, bears N. and S. | |
| 35.50 | Draw, 10 lks. wide, course N. 20° W. | |
| 37.79 | Set trachyte stone 22x14x10 ins., 15 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on N. face, and erect mound of stone, $2\frac{1}{2}$ ft. base, 2 ft. high, N. of corner; pits impracticable. | |
| 44.00 | Leave flat and begin gradual ascent and enter scattering timber, bears N. and S. | |
| 54.00 | Top of 80-foot ascent on N. slope of spur. | |
| 60.00 | Head of draw, course N. | |
| 65.00 | Begin descent, bears N. 70° W. and S. 20° E. | |
| 72.20 | Base of 60-foot descent in open hollow draw, course N. 30° W. | |
| 77.79 | Allowing for convergency, I set iron U. S. Forest Reserve Boundary Post No. 136, 18 ins. in ground to solid rock and build mound of stone, 4 ft. base, 2 ft. high, around same for corner of secs. 31 and 32, marked | |
| | T 31 S S 32 in N. E. quadrant | |
| | R 1 W S 31 in N. W. quadrant | |
| | RESERVE in N. E. quadrant, with 5 notches on E. and 1 on W. sides, from which | |
| | A pinion, 14 ins. diam., bears N. 5° E., 33 lks. dist., marked RES T 31 S R 1 W S 32 | |
| | B T | |
| | A pinion, 10 ins. diam., bears N. 72°30' W., 135 lks. dist., marked T 31 S R 1 W S 31 | |
| | B T | |
| | Note: This corner was left unmarked until after line from south proved to be a closing line and | |

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 31 and 32 S., R. 1 W.

| | |
|---------|---|
| Chains. | <p>C. C. falling to east of this corner. Length of line determined as follows: Latitude of 7th Standard Parallel S., =37°43'26" Latitude south boundary T. 31 S., =38°04' Cos 37°43'26" : cos 38°04' = 480 chs. : 477.79 A.C. log cos 37°43'26" = 0.101842 log cos 38°04' = 9.896137 log 480 = 2.681241 2.679220 = 477.79 Therefore theoretical length of line between secs. 6 and 31 is 77.79 chs. Land, rolling. Soil, rocky and gravelly, 4th rate. Timber, scattering pinion-pine.</p> |
| | <p>At this corner I set off 4°54' N. on declination arc and at 11^h57^m l.m.t. observe sun on meridian and obtain reading of 38°04' on latitude arc.</p> |
| | <p>T. 31 S., R. 1 W.</p> |
| | <p>From corner of secs. 31 and 32 on south boundary of T. 31 S., R. 1 W., I run N. 0°03' W. on true line between secs. 31 and 32 over rolling surface through scattering timber, grad- ually ascending.</p> |
| 2.40 | Draw, 5 lks. wide, course N. 80° W. |
| 11.70 | Draw, 10 lks. wide, in 50-foot depression, course N. 80° W. |
| 18.00 | Top of ascent on W. slope of spur, 100 ft. above sec. corner. |
| 20.00 | Begin gradual descent, bears E. and W. |
| 32.00 | Spring brook, 2 lks. wide, 6 ins. deep, clear fresh water, course W., at base of 80-foot descent, begin ascent, bears E. and W. |
| 40.00 | Set trachyte stone 20x12x10 ins., 15 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |
| | <p>A pinion, 14 ins. diam., bears N. 38° E., 83 lks. dist., marked RES $\frac{1}{4}$ S 32 B T A pinion, 14 ins. diam., bears S. 10°30' W., 100 lks. dist., marked $\frac{1}{4}$ S 31 B T</p> |
| 45.00 | Top of 80-foot ascent on gradual W. slope of spur. |
| 58.00 | Draw, 5 lks. wide, in 20-foot depression, course W. |
| 66.30 | Draw, 5 lks. wide, in 20-foot depression, course W. |
| 77.65 | Poison Creek, 30 lks. wide, 6-foot banks, stream fresh water, 3 lks. wide, 3 ins. deep, course N. 80° W. |
| 79.10 | Road, bears N. 80° W. and S. 80° E., "Coyote and Thurber Road" rough and steep up mountain to E. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 135 18 ins. in ground to rock and build mound of stone 4 ft. base, 2 ft. high, around same for corner of secs. 29, 30, 31 and 32, marked T 31 S S 29 in N. E. quadrant R 1 W S 32 in S. E. quadrant S 31 in S. W. quadrant S 30 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 5 notches on E. and 1 on S. sides, from which A cottonwood, 8 ins. diam., bears S. 11°15' E., 151 lks. dist., marked RES T 31 S R 1 W S 32 B T, on south side of road. A pinion, 10 ins. diam., bears S. 68° W., 59 lks. dist., marked T 31 S R 1 W S 31 B T A cedar, 12 ins. diam., bears N. 51°45' W., 48 lks. dist., marked T 31 S R 1 W S 30 B T No northeast tree available. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., R. 1 W.

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| Chains | Land, hilly and rolling. Soil, rocky and gravelly, 4th rate. Timber, scattering pinion and cedar; cottonwood and aspen along creek. |
| | From corner of secs. 29, 30, 31 and 32 I run N. 0°03' W. on true line between secs. 29 and 30, from corner in north edge of timber, thence over rolling, rocky prairie. |
| 5.55 | Spring brook, 2 lks. wide, 4 ins. deep, course N. 80° W. |
| 7.10 | Spring brook, 2 lks. wide, 3 ins. deep, course N. 80° W. |
| 28.00 | Draw, 3 lks. wide, course N. 70° W., enter scattering timber, bears N. W. and S. E. |
| 35.00 | Draw, 5 lks. wide, course N. 80° W. |
| 39.00 | Flat dry wash, 10 lks. wide, course W. |
| 40.00 | Set trachyte stone 20x12x8 ins., 15 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 10 ins. diam., bears N. 53°30' E., 86 lks. dist., marked RES $\frac{1}{4}$ S 29° E T A pinion, 12 ins. diam., bears S. 66°45' W., 44 lks. dist., marked $\frac{1}{4}$ S 30 B T |
| 45.20 | Draw, 10 lks. wide, course N. 80° W. |
| 72.50 | Begin abrupt descent, bears N. 70° E. and S. 70° W. enter thick small timber. |
| 80.00 | Set trachyte stone 24x14x8 ins. 18 ins. in ground for corner of secs. 19, 20, 29 and 30, marked 5 notches on E. and 2 on S. faces, from which A cedar, 12 ins. diam., bears N. 69°30' E., 59 lks. dist., marked RES T 31 S R 1 W S 20 B T A cedar, 12 ins. diam., bears S. 23°30' E., 24 lks. dist., marked RES T 31 S R 1 W S 29 B T A pinion, 8 ins. diam., bears S. 37° W., 48 lks. dist., marked T 31 S R 1 W S 30 B T A pinion, 14 ins. diam., bears N. 43°30' W., 79 lks. dist., marked T 31 S R 1 W S 19 B T, and erect mound of stone, 4 ft. base, 2 $\frac{1}{2}$ ft. high, W. of corner. Corner falls on steep N. W. slope, 200 ft. below summit. Land, rolling and mountainous. Soil, rocky and gravelly, 4th rate. Timber, small pinion and cedar. Note: This corner falls in obscure place and I therefore set stone corner and will set iron post near road side in flat to north. September 10, 1904. |
| | September 12: At corner of secs. 19, 20, 29 and 30, I set off 38°05'30" on latitude arc and 4°14'45" N. on declination arc and establish meridian with solar. Thence I run N. 0°03' W. on a true line through timber along W. slope of spur between secs. 19 and 20. |
| 1.00 | Begin abrupt descent, bears N. 80° W. and S. 80° E. |
| 3.00 | Side hill wash, 3 lks. wide, course N. 30° W. |
| 7.75 | Side hill wash, 3 lks. wide, course N. 30° W. |
| 15.20 | Base of descent, bears N. 60° E. and S. 60° W., 150 ft. below sec. corner. |
| 16.00 | Coyoto or Antimony Creek, clear fresh water, 20 lks. wide, 12 ins. deep, course S. 60° W. |
| 17.00 | Leave timber and enter irrigated hay field, bears |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., R. 1 W.

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| Chains | N. 60° E., and S. 60° W. |
| 30.25 | Farm road, bears E. and W. Leave cultivated field, enter prairie, begin ascent. House bears E. about 15.00 chs. dist. |
| 32.20 | Irrigation ditch, 10 lks. wide, water 10 ins. deep, course S. 70° W. |
| 35.70 | Wire fence bears N. 85° W. and S. 85° E.; top of 40-foot ascent; thence over rolling rocky prairie bench, gradually ascending. |
| 37.00 | Road, bears N. 80° W. and S. 80° E. |
| 40.00 | Set iron U. S. Forest Reserve Boundary Post No. 134 12 ins. in ground to solid rock, and build mound of stone, 5 ft. base, 2 $\frac{3}{4}$ ft. high around same for $\frac{1}{4}$ sec. corner, marked T 31 S N W $\frac{1}{4}$ sec. 20 in N. E. quadrant R 1 W S W $\frac{1}{4}$ S 20 in S. E. quadrant S E $\frac{1}{4}$ S 19 in S. W. quadrant N E $\frac{1}{4}$ S 19 in N. W. quadrant RESERVE in N. E. and S. E. quadrants on top of cap, and raise mound, 4 ft. base, 3 ft. high, W. of corner. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 133 18 ins. in ground to rock, and build mound of stone, 5 ft. base, 2 $\frac{1}{2}$ ft. high around post for corner of secs. 17, 18, 19 and 20, marked T 31 S S 17 in N. E. quadrant R 1 W S 20 in S. E. quadrant S 19 in S. W. quadrant S 18 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 5 notches on E. and 3 on S., and erect mound of stone, 3 ft. base, 2 $\frac{1}{2}$ ft. high, W. of corner. Land, rolling, hilly, and level rocky. Soil, gravelly and sandy, 3rd and 4th rate. Timber, pinion and cedar south of creek. |
| <hr/> | |
| | From corner of secs. 17, 18, 19 and 20 I run N. 0°03' W. over gently rolling rocky prairie bench. |
| 22.00 | Leave prairie, enter timber, bears N. 60° W. and S. E. |
| 34.50 | Draw, 15 lks. wide, course S. 20° E. |
| 40.00 | Set trachyte stone 24x18x8 ins. 18 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A cedar, 12 ins. diam., bears N. 10° E., 25 lks. dist., marked RES $\frac{1}{4}$ S 17 B T A pinion, 14 ins. diam., bears S. 56°30' W., 91 lks. dist., marked $\frac{1}{4}$ S 18 B T And raise mound of stone, 2 $\frac{1}{2}$ ft. base, 2 ft. high W. of corner. |
| 46.40 | Same draw, 15 lks. wide, course S. 20° W.; begin ascent, bears N. 20° E. and S. 20° W. |
| 55.00 | Top of 50-foot abrupt ascent, bears N. E. and S. 20° W., thence over timbered bench. |
| 56.10 | Old wood road, bears N. E. and S. W. |
| 66.00 | Begin ascent, bears E. and W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 132, 28 ins. in ground, and raise mound of stone, 4 ft. base, 1 $\frac{1}{2}$ ft. high, around post for corner of secs. 7, 8, 17 and 18, marked T 31 S S 8 in N. E. quadrant R 1 W S 17 in S. E. quadrant S 18 in S. W. quadrant S 7 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 5 notches on E. and 4 on S. sides, from which A pinion, 10 ins. diam., bears N. 21° E., 45 |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., R. 1 W.

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| Chains. | lks. dist., marked RES T 31 S R 1 W S 8 B T |
| | A cedar, 12 ins. diam., bears S. 86°30' E., 12 lks. dist., marked RES T 31 S R 1 W S 17 B T |
| | A cedar, 16 ins. diam., bears S. 61°30' W., 12 lks. dist., marked T 31 S R 1 W S 18 B T |
| | A cedar, 12 ins. diam., bears N. 38° W., 29 lks. dist., marked T 31 S R 1 W S 7 B T |
| | Corner falls on south slope of hill 200 ft. above draw. |
| | Land, rolling and hilly. |
| | Soil, rocky and gravelly, 4th rate. |
| | Timber, pinion and cedar. |
| | No work in p.m. on account of cloudy weather. |
| | September 12, 1904. |
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| | September 13: At camp testing instrument. |
| | September 14: At corner of secs. 7, 8, 17 and 18. I set off 38°08' on latitude arc, and 3°28'45" N. on declination arc and at 7 a.m., l.m.t., estab- lish meridian with solar. |
| | Thence I run N. 0°03' W. on true line between secs. 7 and 8, through thick small pinion and cedar timber, as- cending. |
| 15.00 | Top of ascent, 100 ft. above section corner on W. slope of spur. |
| 16.00 | Begin descent, bears N. 80° E. and S. 20° W. |
| 18.75 | Draw, 10 lks. wide, course S. 70° W., at base of 50-foot descent; thence ascending along W. slope of spur. |
| 24.00 | Top of 30-foot ascent on W. slope; begin gradual descent, bears N. 20° E. and S. 20° W. |
| 29.90 | Draw, 10 lks. wide, course S. 60° W. for 10.00 chs., thence S. 20° W.; base of 50-foot descent, begin ascent. |
| 40.00 | Set trachyttestone 26x12x8 ins., 18 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which A pinion, 4 ins. diam., bears N. 53°45' E., 89 lks. dist., marked RES $\frac{1}{4}$ S 8 B T A pinion, 10 ins. diam., bears N. 69° W., 5 lks. dist., marked $\frac{1}{4}$ S 7 B T |
| 45.00 | Top of 150-foot ascent on W. slope of spur, begin descent, bears N. E. and S. 10° W. |
| 52.15 | Draw, 8 lks. wide, course S. 60° W. at base of 80-foot descent, begin ascent. |
| 60.00 | Top of 90-foot ascent on ridge, bears E. and W. |
| 63.00 | Head of draw, course W. |
| 66.00 | Top of ridge, bears N. 80° W. and S. 80° E. |
| 72.00 | Draw, 5 lks. dist., course N. 70° W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 131 28 ins. in ground and raise mound of stone, 4 ft. base, 1 $\frac{1}{2}$ ft. high around same for corner of secs. 5, 6, 7 and 8, marked T 31 S S 5 in N. E. quadrant R 1 W S 8 in S. E. quadrant S 7 in S. W. quadrant S 6 in N. W. quadrant RESERVE In N. E. and S. E. quadrants, with 5 notches on E. and S. faces, from which A pinion, 8 ins. diam., bears E. 56° E., 31 lks. dist., marked RES T 31 S R 1 W S 5 B T A cedar, 6 ins. diam., bears S. 52° E., 61 |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., R. 1 W.

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| Chains. | lks. dist., marked RES T 31 S R 1 W S 8 B T |
| | A cedar, 8 ins. diam., bears S. 67°45' W., 33 lks. dist., marked T 31 S R 1 W S 7 B T |
| | A pinion, 10 ins. diam., bears N. 46°45' W., 26 lks. dist., marked T 31 S S 6 B T, and raise mound of stone, 3½ ft. base, 2½ ft. high, W. of corner. |
| | Corner falls on N. W. spur of ridge. Land, mountainous and hilly. Soil, rocky and gravelly, 4th rate. Timber, pinion and cedar. |
| | At this corner I set off 3°22'30" N. on declina- tion arc and at 11 ^h 55 ^m 37 ^s l.m.t., observe sun on meridian and obtain a reading of 38°08'45" on latitude arc. |
| | From corner of secs. 5, 6, 7 and 8, I run N. 0°03' W. on random line between secs. 5 and 6 over broken mountainous land through small timber. |
| 40.00 | Set stake for temporary ¼ sec. corner. |
| 111.25 | Intersect Sixth Standard Parallel South 16.15 chs. east of standard corner of secs. 31 and 32, at which Point I set iron U. S. Forest Reserve Boundary Post No. 130, 30 ins. in ground and build mound of stone, 3 ft. base, 1 ft. high, around post for C. C. of secs. 5 and 6, marked C C on top of cap south of center R 1 W S 5 in S. E. quadrant T 31 S S 6 in S. W. quadrant RESERVE in S. E. quadrant, with 5 notches on E. and 1 on W. sides, from which A pinion, 10 ins. diam., bears S. 39° E., 58 lks. dist., marked RES T 31 S R 1 W S 5 B T A pinion, 12 ins. diam., bears S. 40° W., 73 lks. dist., marked T 31 S R 1 W S 6 B T |
| | Thence from this closing corner I run S. 0°03' E. on true line between secs. 5 and 6, along steep west slope of ridge. |
| 1.00 | S. W. point of ridge, begin descent, bears E. and W. |
| 12.30 | Base of 250-foot descent, bears E. and W. |
| 15.25 | Draw, 10 lks. wide, course S. 20° E. |
| 16.25 | Old road, bears N. E. and S. W. |
| 18.70 | Dry branch, locally called "Dry Wash", 20 lks. wide, 8-foot banks, course S. 80° W., begin abrupt as- cent. |
| 31.30 | Top of 200-foot ascent, bears N. 80° E. and S. 80° W. Thence over rolling, partially bare washed surface. |
| 48.00 | Draw, 10 lks. wide, course W., in 40-foot depress- ion. |
| 59.75 | Draw, 8 lks. wide in 30-foot depression, course W. |
| 67.70 | Draw, 10 lks. wide, 30-foot rock wall banks, course N. 60° W., begin ascent. |
| 71.25 | Set trachyte stone, 26x14x10 ins., 18 ins. in ground, for ¼ sec. corner, marked ¼ on W. face, from which A pinion, 14 ins. diam., bears S. 79°15' E., 42 lks. dist., marked RES ¼ S 5 B T A cedar, 12 ins. diam., bears N. 88°15' W., 52 lks. dist., marked ¼ S 6 B T |
| 74.75 | Top of nearly bare yellow ridge in saddle, bears E. and W., 150 ft. above draw. |
| 79.25 | Draw, 5 lks. wide, in 50-foot ravine, course S. W. |
| 87.20 | Draw, 5 lks. wide, in 50-foot ravine, course S. 70° W. |
| 91.00 | Begin descent from W. point of rocky ridge bearing to E. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 31 S., R. 1 W.

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| Chains | |
| 102.80 | Base of 200-foot descent at spring brook, 2 lks. wide, 1 in. deep, course N. 60° W.; begin abrupt ascent. |
| 111.00 | Top of 300-foot ascent, bears N. 70° W. and S. 70° E. |
| 111.25 | Intersect corner of secs. 5, 6, 7 and 8. Land, mountainous. Soil, rocky, gravelly and bare rock, 4th rate. Timber, small pinion-pine and cedar. |

September 14, 1904.

GENERAL DESCRIPTION.

T. 31 S., R. 1 W., is a rolling prairie plateau, dotted with groves of aspen and draining to E. and N. E. for a strip of 1 to 2 miles in N. E. portion of township. The surface then breaks off abruptly to the west for 1½ to 2 miles, the remainder or western portion of the township being foothills, the west boundary being in rolling flat below, at a difference of elevation of about 2000 ft. The plateau is arid though it affords some grass. The mountainous portion is covered with pinion pine, cedar and mountain mahogany, all of inferior growth. Coyote or Antimony Creek traverses the township from southeast corner in a westerly direction; going out on west boundary of sec. 19 is bold stream of fresh water, 20 lks. wide and 10 to 12 ins. deep. Antimony was mined along this creek in years past, though no operations at present.

T. 32 S., R. 1 W.

September 15:

At corner of secs. 19, 24, 25 and 30, T. 32 S., R. 1 and 2 W., which is a trachyte 30x10x4 ins. marked as described in notes of General Land Office, but stone is broken off at surface of ground. The marked portion lying on ground, I dig up remaining portion of stone which fits on to bottom of marked portion, thus establishing its identity, and replace same with a trachyte stone 26x12x6, marked with 4 notches on N. and 2 on S. faces, and erect mound of stone 3½ ft. base, 2 ft. high W. of corner. N.
I set off 38°00'30" on latitude arc and 3°05'45" on declination arc and at 7 a.m., l.m.t., establish meridian with solar.

Thence from true corner I run East on true line between secs. 19 and 30 over sage flat.

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| .20 | Old road, bears N. 20° W. and S. 20° E. |
| 2.00 | Begin ascent and enter scattering timber bears N. and S. |
| 16.00 | Enter dense pinion and cedar timber bears N. and S. |
| 24.15 | Draw, 5 lks. wide, bears N. W.; ascent becomes more abrupt over boulders. |
| 38.16 | Set trachyte stone 24x12x8 ins., 18 ins. in ground for ¼ sec. corner, marked ¼ on N. face, from which A pinion, 14 ins. diam., bears N. 74° E., 18 lks. dist., marked ¼ S 19 B T A pinion, 12 ins. diam., bears S. 18°30' E., 31 lks. dist., marked RES ¼ S 30 B T |
| 64.70 | Top of ascent, bears N. and S., 600 ft. above flat, thence over rolling timbered bench with mahogany underbrush. |
| 69.50 | Begin descent, bears N. and S., through open timber. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 1 W.

Chains.

78.12 Trail, bears N. 20° W. and S. 20° E.
 78.16 Allowing for convergency I set iron U. S. Forest Reserve Boundary Post No. 140 18 ins. in ground to rock, with mound of stone, 4½ ft. base, 2 ft. high, around same for corner of secs. 19, 20, 29 and 30, marked
 T 32 S S 20 in N. E. quadrant
 R 1 W S 29 in S. E. quadrant
 S 30 in S. W. quadrant
 S 19 in N. W. quadrant
 RESERVE in N. E., S. E. and S. W. quadrants, with 5 notches on E. and 2 on S. sides, from which
 A yellow pine, 22 ins. diam., bears N. 29° E., 260 lks. dist., marked RES T 32 S R 1 W S 20 B T
 A pinion, 18 ins. diam., bears S. 56° E., 233 lks. dist., marked RES T 32 S R 1 W S 29 B T
 A pinion, 6 ins. diam., bears S. 66°45' W., 83 lks. dist., marked RES T 32 S R 1 W S 30 B T
 A pinion, 8 ins. diam., bears N. 47°30' W., 300 lks. dist., marked T 32 S R 1 W S 19 B T
 Land, mountainous.
 Soil, rocky and gravelly, 4th rate.
 Timber, pinion-pine and cedar, some yellow pine on east side of mile. Distance allows for convergency.

At corner of secs. 19, 20, 29 and 30, I set off 3°59'15" N. on declination arc and at 11^h55^m16^s l.m.t., observe sun on meridian and obtain a reading of 38°00'45" on latitude arc.
 Thence I run
 N. 0°03' W. on true line between secs. 19 and 20, through open timber.
 7.00 Draw, 10 lks. wide, course N. 20° W.
 25.00 Enter dense pinion and cedar timber.
 40.00 Set trachyte stone 32x16x10 ins., 6 ins. in ground to rock and build mound of stone, 3½ ft. base, 2 ft. high, around same for ¼ sec. corner, marked ¼ on W. face, from which
 A pinion, 14 ins. diam., bears N. 31° E., 20 lks. dist., marked RES ¼ S 20 B T
 A yellow pine, 14 ins. diam., bears S. 9° W., 14 lks. dist., marked ¼ S 19 B T
 Thence along W. slope of ridge.
 66.50 Begin abrupt descent bears W. and S. 70° E., at N. W. point of rocky ridge.
 76.00 Base of 250-foot descent bears N. 20° W. and S. E. Enter Crystal Creek or Center Creek, 10 lks. wide, 6 ins. deep, clear fresh water, over boulders, course N. from S. E.
 80.00 True point for sec. corner falls in creek; 43 lks. W. of true point I set iron U. S. Forest Reserve Boundary Post No. 139 8 ins. in ground to solid rock, and build mound of stone, 6 ft. base, 3 ft. high, around same for witness corner to corner of secs. 17, 18, 19 and 20, marked
 W C on top of cap
 T 32 S S 17 in N. E. quadrant
 R 1 W S 20 in S. E. quadrant
 S 19 in S. W. quadrant
 S 18 in N. W. quadrant
 RESERVE in N. E. and S. E. quadrants, with 5 notches on E. and 3 on S. sides, from which

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 1 W.

Chains. A red fir, 12 ins. diam., bears N. 47°45' E.,
120 lks. dist., marked RES W C T 32 S R 1 W
S 17 B T
A red fir, 20 ins. diam., bears S. 37°15' E.,
132 lks. dist., marked RES W C T 32 S
R 1 W S 20 B T
A red fir, 18 ins. diam., bears S. 4°15' W.,
96 lks. dist., marked W C T 32 S R 1 W
S 19 B T
A red fir, 22 ins. diam., bears N. 57° W., 18
lks. dist., marked W C T 32 S R 1 W S 18
B T

Land, mountainous and broken.

Soil, rocky and gravelly, covered with large boulders, 4th rate.

Timber, pinion and cedar, some scattering yellow pine and scattering fir on creek.

September 15, 1904.

September 16:

At true point for corner of secs. 17, 18, 19 and 20, which is 43 lks. E. of W. C. in bed of creek, I set off 38°01'30" on latitude arc and 2°42'30" N. on the declination arc and at 7 a.m., l.m.t., establish meridian with solar.

Thence I run

N. 0°03' W. on true line between secs. 17 and 18 in bed of Crystal Creek.

2.00 Leave creek bed, course N. 20° W. from south; begin abrupt rocky ascent, bears N. 20° W. and S. 20° E.

18.00 Top of 200-foot ascent bears N. 20° W. and S. 20° E., thence along steep W. slope of ridge.

36.60 Side hill draw, 5 lks. wide, course W.

40.00 Set trachyte stone 26x14x6 ins., 18 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which

A pinion, 12 ins. diam., bears N. 60° E., 44 lks. dist., marked RES $\frac{1}{4}$ S 17 B T

A cedar, 10 ins. diam., bears N. 69° W., 26 lks. dist., marked $\frac{1}{4}$ S 18 B T

48.00 Draw, 10 lks. wide, course N. 80° W.

66.00 Begin descent, bears E. and W., and leave dense, enter scattering timber.

73.00 Base of 80-foot descent; draw, 5 lks. wide, course W.; thence along W. slope of spur.

80.00 Set iron U. S. Forest Reserve Boundary Post No. 138 24 ins. in ground, and raise mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high, around same for corner of secs. 7, 8, 17 and 18, marked
T 32 S S 8 in N. E. quadrant
R 1 W S 17 in S. E. quadrant
S 18 in S. W. quadrant
S 7 in N. W. quadrant

RESERVE in N. E. and S. E. quadrants, with 5 notches on E. and 4 on S. sides, from which

A pinion, 10 ins. diam., bears S. 49° E., 121 lks. dist., marked RES T 32 S R 1 W S 17 B T

A pinion, 8 ins. diam., bears S. 58°45' W., 347 lks. dist., marked T 32 S R 1 W S 18 B T

No other trees available.

Land, mountainous.

Soil, rocky and gravelly, 4th rate.

Timber, pinion and cedar.

At this corner I set off 2°36' N. on declination arc and at 11^h54^m55^s l.m.t., observe sun on mer-

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 1 W.

| | |
|---------|--|
| Chains. | idian and obtain reading of 38°02'15" on latitude arc. |
| | From corner of secs. 7, 8, 17 and 18 I run |
| | N. 0°03' W. on true line between secs. 7 and 8, |
| 21.00 | along W. slope of hill, through scattering timber. |
| 37.00 | Draw, 10 lks. wide, course W. |
| | Draw, 10 lks. wide, in 20-foot depression, course |
| | W. |
| 40.00 | Set trachyte stone 18x10x8 ins., 12 ins. in ground |
| | for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from |
| | which |
| | A pinion, 6 ins. diam., bears S. 53°15' E., |
| | 175 lks. dist., marked RES $\frac{1}{4}$ S 8 B T |
| | No other trees available; I erect mound of |
| | stone, 3 $\frac{1}{2}$ ft. base, 2 ft. high, W. of corner. |
| 49.40 | Draw, 5 lks. wide, course W. |
| 64.50 | Old road, bears E. and W. |
| 73.60 | Draw, 8 lks. wide, course N. 80° W. |
| 80.00 | Set iron U. S. Forest Reserve Boundary Post No. 137, |
| | 24 ins. in ground, and raise mound of stone, 4 |
| | ft. base, 2 ft. high, around same for corner of |
| | secs. 5, 6, 7 and 8, marked |
| | T 32 S S 5 in N. E. quadrant |
| | R 1 W S 8 in S. E. quadrant |
| | S 7 in S. W. quadrant |
| | S 6 in N. W. quadrant |
| | RESERVE in N. E. and S. E. quadrants, with 5 |
| | notches on S. and E. sides, from which |
| | A pinion, 8 ins. diam., bears N. 47°45' E., 84 |
| | lks. dist., marked RES T 32 S R 1 W S 5 |
| | B T |
| | A pinion, 14 ins. diam., bears S. 52°30' E., 59 |
| | lks.-dist., marked RES T 32 S R 1 W S 8 |
| | B T |
| | A pinion, 12 ins. diam., bears S. 64°45' W., 38 |
| | lks. dist., marked T 32 S R 1 W S 7 B T |
| | A pinion, 14 ins. diam., bears N. 48°15' W., 24 |
| | lks. dist., marked T 32 S R 1 W S 6 B T |
| | Land, hilly and rolling. |
| | Soil, rocky and gravelly, 4th rate. |
| | Timber, scattering pinion and cedar. |
| | September 16, 1904. |

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| | September 17: At corner of secs. 5, 6, 7 and 8, I |
| | set off 38°03' on latitude arc and 2°19'30" W. on |
| | declination arc and at 7 a.m., l.m.t., establish |
| | meridian with solar. |
| | Thence I run |
| | N. 0°03' W. on random line between secs. 5 and 6. |
| 40.00 | Set stake for temporary $\frac{1}{4}$ sec. corner. |
| 79.70 | Intersect North boundary of township 103 lks. |
| | east of corner of secs. 31 and 32 set by me |
| | September 10th and previously described, at which |
| | point I set a trachyte stone 20x16x10 ins. 12 ins. |
| | in ground for closing corner of secs. 5 and 6, |
| | T 32 S., R. 1 W., marked C C on S., with 5 notches |
| | on E. and 1 on W., from which |
| | A pinion, 14 ins. diam., bears S. 0°45' E., 260 |
| | lks. dist., marked RES CC T 32 S R 1 W |
| | S 5 B T |
| | A pinion, 8 ins. diam., bears S. 21°15' W., 248 |
| | lks. dist., marked C C T 32 S R 1 W S 6 |
| | B T, |
| | and raise mound of stone, 3 $\frac{1}{2}$ ft. base, 2 $\frac{1}{2}$ ft. |
| | high, S. of corner. |
| | Thence from C C I run |
| | S. 0°03' E. on true line between secs. 5 and 6. |
| 3.10 | Draw, 10 lks. wide, course N. 70° W.; begin ascent. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., R. 1 W.

| | |
|---------|---|
| Chains. | |
| 23.70 | Top of 70-foot ascent bears N. 20° E. and S. on W. slope of spur; begin descent, bears N. and S. 30° E. |
| 30.00 | Base of 50-foot descent at draw, 10 lks. wide, course N. W.; begin ascent. |
| 39.70 | Set trachyte 18x16x12 ins., 12 ins. in ground, for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |
| | A pinion, 12 ins. diam., bears N. 48°15' E., 31 lks. dist., marked RES $\frac{1}{4}$ S 5 B T |
| | A pinion, 8 ins. diam., bears S. 86°30' W., 51 lks. dist., marked $\frac{1}{4}$ S 6 B T |
| 60.00 | Top of 150-foot ascent, bears N. W. and S. E. |
| 71.00 | Draw, 10 lks. wide, course N. 80° W. |
| 79.70 | Intersect corner of secs. 5, 6, 7 and 8. Land, rolling and hilly. Soil, rocky and gravelly, 4th rate. Timber, scattering pinion-pine and cedar. |

T. 32 S., Rs. 1 and 2 W.

| | |
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| | From corner of secs. 19, 24, 25 and 30 of T. 32 S., Rs. 1 and 2 W., previously described, I run South on random retracement line between secs. 25 and 30, over level sage-covered flat. |
| 40.00 | Intersect E. and W. $\frac{1}{4}$ sec. line 11 lks. W. of $\frac{1}{4}$ sec. corner, which is a trachyte stone 14x4x3 ins., insecurely set and of deficient size. I replace with a trachyte 18x8x6 ins., set 12 ins. in ground, and marked $\frac{1}{4}$ on W. face, from which existing bearing trees |
| | A pinion, 10 ins. diam., bears N. 63°30' E., 17 lks. dist., I re-mark RES $\frac{1}{4}$ S 30 B T not called for in General Land Office notes, |
| | A pinion, 12 ins. diam., bears S. 33° W., 7 lks. dist., instead of S. 30° W., 5 lks., as called for in notes of General Land Office, I re-mark $\frac{1}{4}$ S 25 B T |
| | Thence from this $\frac{1}{4}$ sec. corner I run N. 0°09' W. on true retracement line between N. halves of secs. 25 and 30, through timber descending. |
| 2.00 | Leave timber, base of descent, 20 ft. below $\frac{1}{4}$ sec. corner. Enter flat, bears N.W. and S.E. |
| 33.50 | Draw, 8 lks. wide, 3 ft. banks, course N. 20° W. |
| 39.95 | I set iron U. S. Forest Reserve Boundary Post No. 141, 30 ins. in ground, and build mound of stone, 4 ft. base, 1 ft. high, around same for witness corner to secs. 19, 24, 25 and 30, marked |
| | W C on top of cap |
| | T 32 S S 19 in N. E. quadrant |
| | R 1 W S 30 in S. E. quadrant |
| | S 25 in S. W. quadrant |
| | R 2 W S 24 in N. W. quadrant |
| | RESERVE in S. E. quadrant, with 4 notches on N. and 2 on S. sides. |
| 40.00 | Intersect corner of secs. 19, 24, 25 and 30. |
| | Thence from the $\frac{1}{4}$ sec. corner I run South on random retracement line between south halves of secs. 25 and 30, through timber. |
| 39.60 | Intersect E. and W. sec. line 11 lks. W. of corner of secs. 25, 30, 31 and 36, which is a trachyte 8x6x6 ins. above ground, marked with 5 notches on N. and 1 on S. edges, as called for in notes of General Land Office, from which existing witness tree |
| | A pinion, 14 ins. diam., bears N. 62°15' E., |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., Rs. 1 and 2 W.

| | |
|---------|--|
| Chains. | <p>28 lks. dist., instead of N. 50° E., 20 lks. as called for in notes of General Land Office and is marked "25", no other marks; I re-mark same RES T 32 S R 1 W S 30 B T and take additional witness trees:</p> <p>A pinion, 12 ins. diam., which bears S. 18° 45' E., 30 lks. dist., marked RES T 32 S R 1 W S 31 B T</p> <p>A pinion, 10 ins. diam., bears S. 18° 45' W., 57 lks. dist., marked T 32 S R 2 W S 36 B T</p> <p>A pinion, 10 ins. diam., bears N. 80° 15' W., 32 lks. dist., marked T 32 S R 2 W S 25 B T</p> <p>Thence from true corner I run N. 0° 09' W. on true retracement line between secs. 25 and 30, through timber, ascending.</p> |
| 5.00 | Top of 50-foot ascent, on east slope of timbered butte. |
| 6.45 | Draw, 5 lks. wide, in 10-foot depression, course E. |
| 9.60 | Begin descent, bears N. 20° W. and S. 20° E. |
| 13.55 | Draw, 5 lks. wide, in 10-foot depression, course E. |
| 20.30 | Draw, 5 lks. wide, in 20-foot depression, course E. |
| 39.60 | Intersect the $\frac{1}{4}$ sec. corner between secs. 25 and 30. Land, hilly and rolling. Soil, rocky, gravelly and sandy, 4th rate. Timber, pinion-pine. |
| <hr/> | |
| | <p>From corner of secs. 25, 30, 31 and 36 previously described I run South on random retracement line between secs. 31 and 36.</p> |
| 39.88 | <p>Intersect E. and W. $\frac{1}{4}$ sec. line 24 lks. W. of the $\frac{1}{4}$ sec. corner, which is a trachyte stone 10x8x6 ins. above ground, firmly set and marked $\frac{1}{4}$ on W. face, from which existing bearing tree</p> <p>A pinion, 4 ins. diam., bears N. 9° W., 331 lks. dist., instead of N. 10° W., 340 lks., as reported in notes of General Land Office.</p> <p>I re-mark same $\frac{1}{4}$ S 36 B T and build mound of stone 3 ft. base, 2$\frac{1}{2}$ ft. high, W. of corner.</p> <p>Thence from this $\frac{1}{4}$ sec. corner I run N. 0° 21' W. on true retracement line between north halves of secs. 31 and 36, over sage brush flat.</p> |
| 9.05 | Spring brook, 5 lks. wide, 4 ft. banks, course N. E. (dries up in day, water runs at night). |
| 34.00 | Leave flat, begin ascent and enter timber, bears N. 20° E. and S. 20° W. |
| 39.83 | <p>I set iron U. S. Forest Reserve Boundary Post No. 142, 24 ins. in ground and raise mound of stone, 4 ft. base, 1$\frac{3}{4}$ ft. high, around post for witness corner to corner of secs. 25, 30, 31 and 36, marked W C on top of cap</p> <p>T 32 S S 30 in N. E. quadrant</p> <p>R 1 W S 31 in S. E. quadrant</p> <p>S 36 in S. W. quadrant</p> <p>R 2 W S 25 in N. W. quadrant</p> <p>RESERVE in N. E. and S. E. quadrants, with 5 notches on N. and 1 on S. sides.</p> |
| 39.88 | Intersect corner of secs. 25, 30, 31 and 36. |
| | <p>From the $\frac{1}{4}$ sec. corner between secs. 31 and 36 I run South on random retracement line between south halves of secs. 31 and 36 over sage brush flat.</p> |
| 40.80 | Intersect south boundary of township 37 lks. west of corner of townships 32 and 33 S., Rs. 1 and 2 W., which is a trachyte stone 14x10x6 ins., above ground marked with 6 notches on N., S., E. and W. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 32 S., Rs. 1 and 2 W.

Chains.

edges, with old mound of stone north of corner.
From corner

A pinion, 8 ins. diam., bears E. 51° E., 167
lks. dist., I mark RES T 32 S R 1 W S 31
B T

A pinion, 10 ins. diam., bears S. $80^{\circ}45'$ E.,
50 lks. dist., I mark RES T 33 S R 1 W
S 6 B T

A pinion, 8 ins. diam., bears S. 54° W., 83
lks. dist., I re-mark RES T 33 S R 2 W
S 1 B T

This tree was marked "S 6" and called for in notes
of General Land Office, as S. 75° W., 75 lks.,
which is untrue, as corner has evidently never been
moved.

A pinion, 8 ins. diam., bears N. $47^{\circ}30'$ W.,
173 lks. dist., I mark T 32 S R 2 W S 36
B T

Thence from true township corner I run
N. $0^{\circ}31'$ W. on true retracement line between secs.
31 and 36, from top of ridge bears E. and W.,
descending through scattering timber.

14.15

27.70

Old road, bears N. W. and S. E.

Base of 120-foot descent; leave scattering timber
and enter sage flat, bears E. and W.

36.80

40.80

Old road, bears N. E. and S. W.

Intersect the $\frac{1}{4}$ sec. corner between secs. 31 and
36.

Land, rolling and hilly.

Soil, rocky and gravelly, 4th rate.

Timber, scattering pinion.

September 17.

GENERAL DESCRIPTION.

T. 32 S., R. 1 W., is mountainous and rolling land,
covered principally with small pinion-pine and
cedar trees, with some open flats in western
portion. Center or Crystal Creek runs in cen-
tral southern portion and flows in a northwesterly
direction and is used for irrigation purposes by
settlers in western portion of secs. 18 and 19.
Other flats in west tier of sections could be
cultivated if creek afforded sufficient water.

Tps. 32 and 33 S., R. 2 W.

September 19: At corner of Tps. 32 and 33 S., Rs.
1 and 2 W., I set off $37^{\circ}59'$ on latitude arc and
 $1^{\circ}32'45''$ N. on declination arc, and at 6 minutes
before 7 o'clock a.m., l.m.t., establish meridian
with solar.

Thence I run

West on random retracement line between secs. 1 and
36 over rolling land, through scattering timber.

40.01

Intersect N. and S. $\frac{1}{4}$ sec. line 14 lks. south of
 $\frac{1}{4}$ sec. corner, which is a trachyte stone $8 \times 6 \times 2$ ins.
marked $\frac{1}{4}$ on N. face and set 2 ins. in ground in
pile of small stones; being deficient in size I
replace stone with iron U. S. Forest Reserve Bound-
ary Post No. 144, set 8 ins. in ground to solid
rock, and build mound of stone, 6 ft. base, 3
ft. high, around same for $\frac{1}{4}$ sec. corner marked
 $\frac{1}{4}$ S 36 on N. side

T 32 S in N. E. quadrant

$\frac{1}{4}$ S 1 on S. side

R 2 W in S. E. quadrant

T 33 S in S. W. quadrant

RESERVE in S. E. quadrant, from which

AQUARIUS FOREST RESERVE BOUNDARY.

Tps. 32 and 33 S., R. 2 W.

| | |
|---------|--|
| Chains. | <p>A pinion, 10 ins. diam., bears N. 81°30' W., 54 lks. dist., instead of N. 85° W., 50 lks. dist., as called for in notes of General Land Office. I re-mark $\frac{1}{4}$ S 36 B T, and take as additional witness tree</p> <p>A pinion, 12 ins. diam., which bears S. 72°30' E. 92 lks. dist., marked $\frac{1}{4}$ S 1 B T</p> <p>Thence from this $\frac{1}{4}$ sec. corner I run S. 89°48' E. on true retracement line between east halves of secs. 1 and 36, over rolling land through scattering timber.</p> |
| 14.20 | Head of draw, course N. 20° E. |
| 18.00 | Begin descent, bears N. and S. |
| 22.10 | Spring brook, 5 lks. wide, 4 ft. banks, stream of fresh water, 2 lks. wide, 2 ins. deep, course N.; base of 80-foot descent. |
| 23.00 | Begin ascent, bears N. and S. |
| 27.50 | Top of 80-foot ascent, bears N. and S. |
| 39.96 | Five lks. west of this corner I set iron U. S. Forest Reserve Boundary Post No. 143, 10 ins. in ground to solid rock and build mound of stone, 5 ft. base, 3 ft. high, around same for witness corner to corner of Tps. 32 and 33 S., Rs. 1 and 2 W., marked |
| | W. C. on top of cap |
| | T 32 S S 31 in N. E. quadrant |
| | R 1 W S 6 in S. E. quadrant |
| | T 33 S S 1 in S. W. quadrant |
| | R 2 W S 36 in N. W. quadrant |
| | RESERVE in N. E., S. E. and S. W. quadrants, with 6 notches on N., S., E. and W. sides. |
| 40.01 | Intersect corner of Tps. 32 and 33 S., Rs. 1 and 2 W. |
| | Land, rolling and hilly. |
| | Soil, rocky and gravelly, 4th rate. |
| | Timber, scattering pinion. |

T. 33 S., R. 2 W.

| | |
|-------|--|
| 80.00 | <p>From $\frac{1}{4}$ sec. corner on N. boundary of sec. 1 I run South on random line through center of sec. 1, over rolling land through scattering timber.</p> <p>Set stake for temporary $\frac{1}{4}$ section corner; no trace of old $\frac{1}{4}$ corner being found I proceed to reestablish same by running line between secs. 1 and 12.</p> <p>To reestablish the $\frac{1}{4}$ sec. corner between secs. 1 and 12,</p> <p>From corner of secs. 1, 2, 11 and 12, which is a trachyte stone 12x10x6 ins., above ground, firmly set and properly marked, thence I run</p> <p>East on random retracement line between secs. 1 and 12, over gently rolling flat "Johns Valley".</p> |
| .60 | Flat draw, 10 lks. wide, course S. 60° W. |
| 39.10 | Falls 60 lks. N. of temporary stake set on line south through center of sec. |
| 43.90 | Draw, 10 lks. wide, course S. W.; enter timber and begin ascent, bears N. and S. W. |
| 88.45 | Intersect N. and S. offset line 19 lks. N. of W.C. to corner of secs. 1, 6, 7 and 12, which is reported 10.00 chs. E. of true point and is 700 ft. above valley. Length of line reported 80.00 chs. |
| | Thence from W. C. I run |
| | N. 89°52' W. on true line between secs. 1 and 12. (10.00 true point for sec. corner, no obstacle exists and corner should have been set here). |
| 49.23 | The proportional distance for $\frac{1}{4}$ corner (total |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

Chains

reported distance being 90.00 chs., actual distance being 88.45), which point is 47 lks. N. and 12 lks. E. of temporary stake set on line S. through center of sec. 1.

I set iron U. S. Forest Reserve Boundary Post No. 145, 30 ins. in ground, and raise a mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high, around same for $\frac{1}{4}$ sec. corner, marked

$\frac{1}{4}$ S 1, T 33 S on N. side

$\frac{1}{4}$ S 12 R 2 W on S. side

RESERVE in N. E. and S. E. quadrants, from which

A pinion, 12 ins. diam., bears N. $9^{\circ}30'$ E.,

176 lks. dist., marked RES $\frac{1}{4}$ S 1 B T

A cedar, 8 ins. diam., bears S. $71^{\circ}30'$ W., 67

lks. dist., marked $\frac{1}{4}$ S 12 B T

88.45

Intersect corner of secs. 1, 2, 11 and 12.

Land, level and mountainous.

Soil, rocky and gravelly, 3rd and 4th rate.

Timber, pinion and cedar.

Note: This line was evidently never run, as the offset of 30.00 chs. N., as called for in notes of General Land Office, would meet with many more obstacles than the true line and would be absolutely impracticable.

Thence from this $\frac{1}{4}$ sec. corner on south boundary of sec. 1, I run

N. $0^{\circ}05'$ W. on true line, through center of sec. 1, over open flat land.

3.00 Leave open flat, enter timber and begin ascent, bears N. 60° W. and S. 60° E.

3.35 Draw, 10 lks. wide, course N. 60° W.

6.50 Top of 30-foot ascent, bears N. W. and S. E.

11.50 Begin descent, bears E. and W.

13.00 Draw, 15 lks. wide, course S. 70° W., at base of 40-foot descent; begin ascent.

36.00 Top of 300-foot ascent, bears E. and W.; thence along east slope of butte, standing on west end of ridge about 10.00 chs. west of line. Saddle on ridge about 10.00 chs. east of line.

46.00 Begin gradual descent, bears E. and N. 60° W.

56.00 Base of 50-foot descent. Leave timber, enter sage-covered flat, bears N. 70° W. and S. 70° E.

75.00 Leave open flat, enter scattering timber.

79.53 Intersect the $\frac{1}{4}$ sec. corner on N. boundary of sec. 1.

Land, rolling and mountainous.

Soil, rocky and gravelly, 4th rate.

Timber, pinion-pine and cedar.

September 19, 1904.

September 20:

Note: Previous to subdividing sec. 12 the $\frac{1}{4}$ sec. corner between 11 and 12 not being found I proceeded to establish same.

From corner of secs. 11, 12, 13 and 14, which is a trachyte stone 8x6x6 ins. above ground, correctly marked and firmly set,

Thence I run

North on random retracement line between secs. 11 and 12, over rolling prairie land in "Johns Valley".

40.00 No trace of $\frac{1}{4}$ sec. corner being found, I set stake for temporary $\frac{1}{4}$ sec. corner.

79.68 Intersect E. and W. sec. line 47 lks. east of corner of secs. 1, 2, 11 and 12.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

Chains. Thence from corner of secs. 1, 2, 11 and 12, I run
S. 0°20' E. on true retracement line between secs.
11 and 12 over rolling prairie land.
.60 Flat draw, course S. 60° E.
39.84 Set iron U. S. Forest Reserve Boundary Post No. 147
20 ins. in ground to rock and build mound of stone
4 ft. base, 2 ft. high, around same for $\frac{1}{4}$ sec.
corner, marked
T 33 S $\frac{1}{4}$ S 12 on E. side
R 2 W $\frac{1}{4}$ S 11 on W. side
RESERVE in S. E. quadrant, and raise mound of
stone, 4 ft. base, 3 ft. high, W. of corner; pits
impracticable.
47.00 Base of 20-foot descent; enter swale flat, bears
N. E. and S. W.
50.50 Swale draw, course S. W.
74.00 Swale draw, course S. 60° W.
79.68 Intersect corner of secs. 11, 12, 13 and 14.
Land, level and rolling.
Soil, rocky and gravelly, 4th rate.
No timber.

From the $\frac{1}{4}$ sec. corner between secs. 1 and 12,
previously described, I run
South through center of sec. 12 on random line over
open sage flat.
40.00 Set stake for temporary corner of sec. 12.
79.52 Intersect south boundary of sec. 12, 95 lks. W. of
the $\frac{1}{4}$ sec. corner between secs. 12 and 13, which
is a trachyte boulder in place, as called for in
notes of General Land Office.
Thence from this $\frac{1}{4}$ sec. corner I run
N. 0°41' W. on true line through center of sec. 12,
through timber along broken west slope of hill.
16.70 Draw, 10 lks. wide, course W.
27.50 Begin descent, bears E. and W.
32.00 Draw, 10 lks. wide, course W., at base of 50-foot
descent.
39.76 Set stake for temporary center corner on true
N. and S. line.
40.50 Wash, 5 lks. wide, course N. 70° W.
43.50 Begin descent, bears N. E. and S. W.
45.00 Wash, 5 lks. wide, course W.
49.00 Rocky side-hill wash, course W.
66.00 Base of 100-foot descent, leave timber, enter flat,
bears N. 30° E. and S. 30° W.
70.00 Draw, 10 lks. wide, 3 ft. banks, course S.W.
79.52 At the $\frac{1}{4}$ sec. corner between secs. 1 and 12.
Land, hilly and broken.
Soil, rocky and gravelly, 4th rate.
Timber, pinion-pine, some cedar.

From $\frac{1}{4}$ sec. corner on W. boundary of sec. 12, pre-
viously described, I run
East on random line through center of sec. 12,
over rolling prairie valley.
39.48 $\frac{1}{2}$ Intersect true N. and S. line through center of
section, 2 lks. N. of temporary stake set for
center of section.
78.33 $\frac{1}{2}$ Intersect E. boundary of sec. 12, 8 lks. S. of the
 $\frac{1}{4}$ sec. corner between secs. 7 and 12, which is
stone in place as called for in notes of General
Land Office and is witnessed by old bearing tree
N. W., not called for in notes.
Thence from this $\frac{1}{4}$ sec. corner I run
S. 89°57' W. on true line through center of sec.
12, through timber, descending abruptly.

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

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| Chains. | |
| 26.35 | Draw, 10 lks. wide, course N. W. |
| 31.90 | Same draw, course S. W. |
| 37.45 | Same draw, course N. W., at base of 500-foot descent. |
| 38.85 | At intersection of true north and south with east and west line, which is 6 lks. N. of temporary stake halfway on north and south line, I set iron U. S. Forest Reserve Boundary Post No. 146, 26 ins. in ground and build mound of stone, 4½ ft. base, 1½ ft. high, around same for center of sec. 12, marked CENTER S 12 around N. side T 33 S in N. E. quadrant R 2 W in S. E. quadrant RESERVE in N.E., S.E. and S.W. quadrants, from which A pinion, 12 ins. diam., bears N. 49°45' E., 64 lks. dist., marked RES N E ¼ S 12 B T A pinion, 14 ins. diam., bears S. 38°15' E., 23 lks. dist., marked RES S E ¼ S 12 B T A pinion, 18 ins. diam., bears S. 75° W., 80 lks. dist., marked RES S W ¼ S 12 B T A pinion, 12 ins. diam., bears N. 44°45' W., 37 lks. dist., marked N W ¼ S 12 B T |
| 56.40 | Base of descent 140 ft. below center corner, enter "Johns Valley", open prairie valley. Leave timber, bears N. 20° E. and S. 20° W. |
| 72.00 | Swale in flat draws to S. W. |
| 78.33½ | Intersect the ¼ sec. corner between secs. 11 and 12. Land, mountainous and level. Soil, rocky and gravelly, 4th rate. Timber, pinion-pine, some cedar. |
| | September 20, 1904. |
| | September 21: At corner of secs. 11, 12, 13 and 14, which is a trachyte stone 8x6x6 ins. above ground, firmly set and correctly marked. I build mound of stone, 3 ft. base, 2½ ft. high, W. of this corner; pits impracticable. At the true corner I set off 37°57'30" on latitude arc and 0°46'45" N. on the declination arc, and at 7 minutes of 7 o'clock a.m., l.m.t., establish meridian with solar. Thence I run South on random retracement line between secs. 13 and 14, over rolling prairie valley. |
| 39.55 | Intersect E. and W. ¼ sec. line 16 lks. W. of the ¼ sec. corner, which is a boulder in place 4x3x2½ ft. above ground, marked ¼ on N. side. - I build mound of stone, 2 ft. base, 1½ ft. high, on top of boulder; from this ¼ corner A red fir, 6 ins. diam., bears N. 46°30' E., 56 lks. dist., I mark RES ¼ S 13 B T A red fir, 10 ins. diam., bears N. 80° W., 30 lks. dist., I mark ¼ S 14 B T Thence from this ¼ sec. corner I run N.0°14' W. on true retracement line between north halves of secs. 13 and 14, over rolling bench sloping to west through timber. |
| 1.00 | Draw in 50-foot depression, course W. |
| 6.80 | Draw, 10 lks. wide, in 20-foot depression, course W. |
| 15.00 | Begin descent, bears N. 60° E. and S. 60° W. |
| 22.00 | Base of 90-foot descent; leave scattering timber, enter prairie valley, bears N. 60° E. and S.60° W. |
| 22.20 | Flat wash, 10 lks. wide, course N. 70° W. |
| 38.50 | Flat wash, 5 lks. wide, course N. 70° W. |
| 39.50 | Five lks. south of this corner I set iron U. S. Forest Reserve Boundary Post No. 148, 30 ins. in ground and build mound of stone, 3 ft. base, |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

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| Chains. | <p>1½ ft. high, around same, for witness corner to corner of secs. 11, 12, 13 and 14, marked W C on top of cap T 33 S S 12 in N. E. quadrant R 2 W S 13 in S. E. quadrant S 14 in S. W. quadrant S 11 in N. W. quadrant RESERVE in N.E. and S.E. quadrants, with 4 notches on S. and 1 on E. faces.</p> |
| 39.55 | <p>Intersect corner of secs. 11, 12, 13 and 14.</p> <p>Thence from ¼ sec. corner between secs. 13 and 14 I run South on random retracement line between south halves of secs. 13 and 14.</p> |
| 40.69 | <p>Intersect E. and W. sec. line 34 lks. E. of corner of secs. 13, 14, 23 and 24, which is a trachyte stone 8x6x4 ins., set 2 ins. in ground, small pile of stone around same and is properly marked; being deficient in size I replace stone with iron U. S. Forest Reserve Boundary Post No. 149, set 28 ins. in ground, with mound of stone, 4 ft. base, 1½ ft. high, around same for corner of secs. 13, 14, 23 and 24, marked T 33 S S 13 in N. E. quadrant R 2 W S 24 in S. E. quadrant S 23 in S. W. quadrant S 14 in N. W. quadrant RESERVE in N. E. and S. E. quadrants, with 3 notches on S. and 1 on E. sides, from which A cedar, 4 ins. diam., bears N. 82°15' E., 46 lks. dist., marked RES T 33 S R 2 W S 13 B T A pinion, 14 ins. diam., bears S. 73°15' E., 102 lks. dist., marked RES T 33 S R 2 W S 24 B T A cedar, 6 ins. diam., bears S. 67° W., 40 lks. dist., marked T 33 S R 2 W S 23 B T A pinion, 8 ins. diam., bears N. 32° W., 120 lks. dist., marked T 33 S R 2 W S 14 B T</p> <p>Thence from this sec. corner I run N. 0°29' E. on true retracement line between secs. 13 and 14, over rolling timbered bench, sloping to W.</p> |
| 5.10 | <p>Draw, 10 lks. wide, in 30-foot depression, course N. 60° W.</p> |
| 24.90 | <p>Flat draw, 6 lks. wide, course N. W.</p> |
| 30.00 | <p>Flat draw, 5 lks. wide, course N. 70° W.</p> |
| 40.69 | <p>Intersect the ¼ sec. corner between secs. 13 and 14. Land, hilly and mountainous. Soil, rocky and gravelly, 4th rate. Timber, pinion-pine and cedar.</p> |
| <hr/> <p>At the corner of secs. 13, 14, 23 and 24 I set off 0°40' N. on declination arc and at 11^h53^m09^s l.m.t. observe sun on meridian and obtain a reading of 37°56'30" on latitude arc.</p> <p>From corner of secs. 13, 14, 23 and 24, I run South on random retracement line between secs. 23 and 24, through timber over rolling bench sloping to W.</p> | |
| 39.58 | <p>Intersect E. and W. ¼ sec. line 7 lks. W. of the ¼ sec. corner between secs. 23 and 24, which is a trachyte 8x4x2 ins., set in small pile of stone, marked ¼ on E. face, 2 notches on S. and 1 on E.; being deficient in size and improperly marked I replace same with a trachyte stone 26x10x5 ins.</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

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| Chains. | set 18 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face and raise mound of stone 2x2 ft. W. of corner. From $\frac{1}{4}$ sec. corner A cedar, 5 ins. diam., bears S. 32° E., 112 lks. dist., I marked RES $\frac{1}{4}$ S 24 B T A cedar, 14 ins. diam., bears S. 67°45' W., 100 lks. dist., I marked $\frac{1}{4}$ S 23 B T Thence from this $\frac{1}{4}$ sec. corner I run N. 0°06' W. on true retracement line between north halves of secs. 23 and 24, through timber over rolling bench. |
| .20 | Draw, 5 lks. wide, course W. |
| 5.30 | Draw, 5 lks. wide, course W. |
| 16.00 | Draw, 5 lks. wide, course W. |
| 22.20 | Draw, 5 lks. wide, course W. |
| 27.80 | Draw, 10 lks. wide, course S. W. |
| 39.58 | Intersect corner of secs. 13, 14, 23 and 24. |
| | Thence from $\frac{1}{4}$ sec. corner between secs. 23 and 24 I run South on random retracement line between south halves of secs. 23 and 24. |
| 40.00 | Set stake for temporary corner of secs. 23, 24, 25 and 26. |
| | September 21, 1904. |
| | Random Lines. |
| | September 22: From stake driven for temporary corner of secs. 23, 24, 25 and 26 I run South on random line. |
| 40.00 | No trace of $\frac{1}{4}$ sec. corner being found I set stake for temporary $\frac{1}{4}$ sec. corner. |
| 60.00 | No trace of corner of secs. 25, 26, 35 and 36 being found I set stake for temporary sec. corner and continue from this stake south between secs. 35 and 36. |
| 40.00 | No trace of $\frac{1}{4}$ sec. corner being found I set stake for temporary $\frac{1}{4}$ sec. corner. |
| 80.00 | No trace of sec. corner being found I set stake for temporary corner of secs. 1, 2, 35 and 36. |
| | After establishing corner of secs. 1, 2, 35 and 36, by retracing south boundary of township. |
| 81.80 | Intersect south boundary of township 51 lks. W. of corner of secs. 1, 2, 35 and 36, which is Iron U. S. Forest Reserve Boundary Post No. 152 set by me For true line between secs. 25 and 26 see page For true line between secs. 35 and 36 see page |
| | Reestablishment of corner of secs. 1, 2, 35 and 36. September 24: Thence to reestablish corner of secs. 1, 2, 35 and 36, Tps. 33 and 34 S., R. 2 W., I begin at the $\frac{1}{4}$ sec. corner between secs. 2 and 35, which is a trachyte 8x8x6 ins. above ground firmly set and marked $\frac{1}{4}$ on N. on W. bank of Horse Creek. Thence I run East on random retracement line between secs. 2 and 35, over open prairie flat. |
| 39.56 | Stake on random line south for temporary corner of secs. 1, 2, 35 and 36, bears R. 86 lks. and continue east between secs. 1 and 36. |
| 80.14 | Intersect $\frac{1}{4}$ sec. line 128 lks. N. of the $\frac{1}{4}$ sec. corner between secs. 1 and 36. Thence from this $\frac{1}{4}$ sec. corner between secs. 1 and 36, which is a 10x10x6 ins. above ground, marked and witnessed as described, I run N. 89°05' W. on true retracement line between secs. 1 and 36, descending. |
| 4.60 | Base of 80-foot descent, at north fork of Horse Creek, 10 lks. wide, dry stream, course S. W. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

Chains.

6.40 Road, bears N. 20° E. and S. 20° W.

8.70 Begin ascent, abrupt, bears N. 20° E. and S. 20° W.

15.20 Top of white sandstone ridge 200-foot ascent, bears N. 20° E. and S. 20° W.; begin abrupt descent.

24.20 Head of draw, course S. W.; thence over rolling bench, gradually descending.

28.20 Begin abrupt descent down red gravelly ridge, bears N. E. and S. 20° W.

34.30 Base of 200-foot descent. Leave timber, enter open flat, bears N. E. and S. W.

38.70 Enter timber, bears N. 70° W. and S. 70° E.

40.07 Set iron U. S. Forest Reserve Boundary Post No. 152, 30 ins. in ground and mound of stone and earth, 3 ft. base, 1 ft. high, around same for corner of secs. 1, 2, 35 and 36, marked
T 33 S S 36 in N. E. quadrant
R 2 W S 1 in S. E. quadrant
T 34 S S 2 in S. W. quadrant
S 35 in N. W. quadrant
RESERVE in N. E. and S. E. quadrants, with 1 notch on E. and 5 on W. sides, from which
A double pinion, 12 ins. diam., bears N. 5°30' E. 46 lks. dist., marked RES T 33 S R 2 W S 36 B T
A pinion, 10 ins. diam., bears S. 64° E., 41 lks. dist., marked RES T 34 S R 2 W S 1 B T
A cedar, 14 ins. diam., bears S. 83°30' W., 31 lks. dist., marked T 34 S R 2 W S 2 B T
A pinion, 8 ins. diam., bears N. 32° W., 59 lks. dist., marked T 33 S R 2 W S 35 B T
From this corner the temporary stake on random line south between secs. 35 and 36 bears N. 150 lks., on west 51 lks. dist.
Thence from corner of secs. 1, 2, 35 and 36 I run N. 89°05' W. on true retracement line between secs. 2 and 35, through scattering timber.

6.00 Leave timber, enter open flat, bears N. E. and S. W.

27.30 Old road, bears N. W. and S. E.

35.60 Wash, 5 lks. wide, 4 ft. banks, course N. 80° W.

40.07 Intersect the $\frac{1}{2}$ sec. corner between secs. 2 and 35. Land, rolling, level and mountainous. Soil, sandy, gravelly and rocky, 3rd and 4th rate. Timber, pinion-pine and cedar of small scrubby growth.

September 24, 1904.

From foregoing notes it appears that the line south between secs. 23 and 24, 25 and 26, 35 and 36, for $2\frac{1}{2}$ miles is 150 lks. long by my measurement, which makes each $\frac{1}{2}$ mile 30 lks. long.

September 21: Temporary stake set on random line south between secs. 23 and 24 is moved 35 lks. W. and 30 lks. S. of original position as previously determined and at this, the true point for reestablished corner of secs. 23, 24, 25 and 26, I set iron U. S. Forest Reserve Boundary post No. 150, 30 ins. in ground and raise mound of stone, 3 ft. base, 1 ft. high, around same for corner of secs. 23, 24, 25 and 26, marked
T 33 S S 24 in N. E. quadrant
R 2 W S 25 in S. E. quadrant
S 26 in S. W. quadrant
S 23 in N. W. quadrant
RESERVE in N. E. and S. E. quadrants, with 1 notch on E. and 2 on S. sides, from which

T. 33 S., R. 2 W.

Chains

- A pinion, 16 ins. diam., bears N. $35^{\circ}45'$ E.,
51 lks. dist., marked RES T 33 S R 2 W
S 24 B T
- A red fir, 8 ins. diam., bears S. 26° E., 79
lks. dist., marked RES T 33 S R 2 W S 25
B T
- A red fir, 16 ins. diam., bears S. $62^{\circ}15'$ W.,
109 lks. dist., marked T 33 S R 2 W S 26
B T
- A red fir, 12 ins. diam., bears N. $26^{\circ}45'$ W.,
111 lks. dist., marked T 33 S R 2 W S 23
B T

Thence from corner of secs. 23, 24, 25 and 26, as
established, I run

N. $0^{\circ}30'$ E. on true retracement line between secs.
23 and 24, through timber along west slope of
mountain.

2.15 Wash, 3 lks. wide, course N. W.

10.60 Draw, 8 lks. wide, course N. 80° W. in 60-foot de-
pression.

18.80 Draw 8 lks. wide, course W.

40.30 Intersect the $\frac{1}{4}$ sec. corner between secs. 23 and
24, previously described.

Land, rolling and mountainous.

Soil, rocky and gravelly, 4th rate.

Timber, pinion and cedar, occasional fir.

September 21, 1904.

September 23; The temporary stake set for temporary
corner of secs. 25, 26, 35 and 36, on random
line south, as shown on page, is moved (30+60)
= 90 lks. south to true north and south position,
and to determine its proportional position east
and west I run from this point (90 lks. south of
original stake)

West on random retracement line between secs. 26
and 35.

40.00 No trace of $\frac{1}{4}$ sec. corner.

79.23 Intersect N. and S. sec. line 67 lks. N. of corner
of secs. 26, 27, 34 and 35, which is a trachyte
stone 8x6x6 ins. above ground, correctly marked
and firmly set.

Thence from same point for temporary corner of
secs. 25, 26, 35 and 36 (90 lks. south of origin-
al stake) I run

East on random retracement line between secs. 25
and 36.

40.00 No trace of $\frac{1}{4}$ sec. corner.

79.76 Intersect E. boundary of Township, 30 lks. south
of corner of secs. 25, 30, 31 and 36, which is a
trachyte 8x5x3, correctly marked and lying on top
of ground. 3 chs. south to brook, as called for in
notes of General Land Office verifies that stone is
in original position. I leave corner undisturbed
as its position only affects my line.

Thence from this corner I run

S. $89^{\circ}47'$ W. on true retracement line between secs.
25 and 36, through open scattering timber bench.

3.80 Spring brook, 3 lks. wide, course N. W., in dry
bed of reservoir; 3.00 chs. N. is dam of reser-
voir E. and W.; 5.00 chs. dist. reservoir extends
5.00 chs. to south.

25.00 Begin descent bears N. and S. and enter dense small
timber.

39.97 True point for $\frac{1}{4}$ sec. corner; no trace being found
I do not reestablish this corner as it does not
concern reserve boundary line directly.

79.94 True point for corner of secs. 25, 26, 35 and 36,
which is reestablished by me and set as described

AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

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| Chains. | on page , 500 ft. below summit and is 18 lks. W. and $(60 + 30) = 90$ lks south of original stake set on random south. |
| | Thence from true corner of secs. 25, 26, 35 and 36 I run |
| | S. $89^{\circ}31'$ W. on true retracement line between secs. 26 and 35, through timber, descending. |
| 26.00 | Draw, 10 lks. wide, course S. 80° W. |
| 28.60 | Same draw, course N. 80° W. |
| 39.52 $\frac{1}{2}$ | True point for $\frac{1}{4}$ sec. corner, no trace found, and I set no corner, as it does not directly concern position of corner on forest reserve boundary. |
| 59.70 | Leave timber at base of descent 300 ft. below sec. corner, enter open flat "Johns Valley", bears N. and S. |
| 68.30 | Road, bears N. and S. |
| 77.30 | Horse creek, 10 lks., 15 ft. banks, course N. |
| 79.05 | At corner of secs. 26, 27, 34 and 35. Land, mountainous and level. Soil, rocky, gravelly, 4th rate. Timber, pinion-pine and cedar. |

September 23, 1904.

Note: Line between secs. 26 and 35 is reported in notes of General Land Office as 79.60; between secs. 25 and 36 is 80.50, to which the above distance of 79.05 and 79.94 are proportional.

TRUE LINE.

September 22: At true point for corner of secs. 25, 26, 35 and 36, which is 90 lks. south and 18 lks. west of original position of temporary stake set on random line, I set iron U. S. Forest Reserve Boundary Post No. 151, 14 ins. in ground to rock and raise mound of stone, 4 ft. base, $2\frac{1}{2}$ ft. high, around same for corner of secs. 25, 26, 35 and 36, marked

T 33 S S 25 in N. E. quadrant
R 2 W S 36 in S. E. quadrant
S 35 in S. W. quadrant
S 26 in N. W. quadrant
RESERVE in N. E. and S. E. quadrants, with 1 notch on E. and 1 on S. sides, from which

A pinion, 10 ins. diam., bears N. 33° E., 116 lks. dist., marked RES T 33 S R 2 W S 25 B T
A cedar, 14 ins. diam., bears S. 31° E., 68 lks. dist., marked RES T 33 S R 2 W S 36 B T
A pinion, 12 ins. diam., bears S. 17° W., 38 lks. dist., marked T 33 S R 2 W S 35 B T
A cedar, 12 ins. diam., bears N. $28^{\circ}30'$ W., 170 lks. dist., marked T 33 S R 2 W S 26 B T

Thence from this sec. corner I run
N. $0^{\circ}07'$ W. on true retracement line between secs. 25 and 26, over rolling and broken timbered bench.

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| 21.20 | Spring brook, 2 lks. wide, 3 ins. deep, course W. Spring 150 lks. E. of line. |
| 28.50 | Draw, 8 lks. wide, course W. |
| 33.20 | Rocky west point of spur, begin descent, bears E. and W. |
| 40.30 | Set trachyte stone 16x10x8 ins., 12 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |
| | A red fir, 22 ins. diam., bears N. $15^{\circ}30'$ E., 101 lks. dist., marked RES $\frac{1}{4}$ S 25 B T |
| | A pinion, 12 ins. diam., bears N. $65^{\circ}15'$ W., |

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AQUARIUS FOREST RESERVE BOUNDARY.

T. 33 S., R. 2 W.

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| Chains | 85 lks. dist., marked $\frac{1}{4}$ S 26° B T, and raise mound of stone, 3 ft. base, 2 ft. high/ W. of corner. |
| | (True point of this corner is 60 lks. S. and 27 lks. W. of temporary stake set on random line south). |
| 42.00 | Spring brook, 3 lks. wide, 4 ins. deep, course W., base of 100 ft. descent, begin ascent. |
| 45.70 | Top of 100-foot ascent, bears N. 20° W. and E.; thence along W. slope of spur. |
| 61.30 | Draw, 10 lks. wide, course W. |
| 72.70 | Begin descent, bears N. E. and S. 10° W. |
| 80.20 | Base of 100-foot descent, bears N. 30° E. and S. 30° W. |
| 80.60 | Intersect corner of secs. 23, 24, 25 and 26, which was established by me as previously described. Land, mountainous and broken. Soil, rocky and gravelly, 4th rate. Timber, pinion-pine and cedar; some scattering fir about streams and draws. |

September 22, 1904.

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| | September 23: From corner of secs. 1, 2, 35 and 36 established by me previously, I run N. 0°30' W. on true line between secs. 35 and 36, over level land, through timber. |
| 1.00 | Leave timber, enter open flat, bears E. and W. |
| 7.70 | Draw in flat, course W. |
| 21.00 | Begin ascent and enter timber, bears N. 60° W. and S. 60° E. |
| 40.30 | Set trachyte stone 20x12x6 ins., 15 ins. in ground for $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which |
| | A pinion, 6 ins. diam., bears N. 28° E., 60 lks. dist., marked RES $\frac{1}{4}$ S 36 B T |
| | A pinion, 8 ins. diam., bears N. 63° W., 125 lks. dist., marked $\frac{1}{4}$ S 35 B T |
| 46.00 | Top of 250-foot ascent, bears N. W. and S. E.; thence over rolling rocky bench sloping to W. |
| 56.50 | Flat draw, 5 lks. wide, course E. 70° W. |
| 64.90 | Draw, 10 lks. wide, course N. 80° W. |
| 74.70 | Rocky wash, 5 lks. wide, course W. |
| 80.30 | Intersect corner of secs. 25, 26, 35 and 36, previously described. Land, hilly and broken. Soil, rocky and gravelly. Timber, pinion and cedar. |

September 23, 1904.

Note: It is noted that Mr. Walker in reestablishing the corner of secs. 23, 24, 25 and 26, and corner of secs. 25, 26, 35 and 36 did not follow the proper rules of the General Land Office for the restoration of lost and obliterated corners in restoring lost corners on section meridional lines. His plan of procedure was not noted until after he had completed the survey of the boundaries of the Aquarius Forest Reserve and had removed to the Payson Forest Reserve, too far away to call him back to make a change. Inasmuch as his establishment of the lost corners above noted are only out in longitude a short distance, as compared to the location, if the proper rule of procedure had been followed, it is decided to submit his work to the General Land Office with recommendations for approval.

A. F. Dunnington.

T. 34 S., R. 2 W.

Chains September 24: From corner of secs. 1, 2, 35 and 36 on N. boundary of T. 34 S., R. 2 W., I run South on random retracement line between secs. 1 and 2.

40.00 No trace of $\frac{1}{2}$ sec. corner being found I set stake for temporary $\frac{1}{2}$ sec. corner and continue south.

80.00 No trace of old section corner.; set stake for temporary corner of secs. 1, 2, 11 and 12. Thence from this temporary stake I run West on random line between secs. 2 and 11.

40.05 Intersect N. and S. $\frac{1}{2}$ sec. line 71 lks. south of the $\frac{1}{2}$ sec. corner, which is a "washed boulder" 8x5x6 ins. above ground, marked $\frac{1}{2}$ on N. face, as described in notes of General Land Office.

Note: As there is no reported survey south and east of corner of secs. 1, 2, 11 and 12, I make lines 80.00 chs., the correct length as reported in old survey, thus maintaining by measurement the original area of sec. 2.

Thence from $\frac{1}{2}$ sec. corner between secs. 2 and 11 I run S. 89°30' E. on true retracement line between secs. 2 and 11, over open level flat.

4.00 Wash 5.00 lks., course N. W.

20.00 Leave open flat, enter scattering timber and begin gradual ascent, bears N. E. and S.

37.40 Brush fence, bears N. 70° W. and S. 70° E., enter Jolley's pasture enclosure.

40.00 At the true point for corner of secs. 1, 2, 11 and 12, which is 5 lks. W. of temporary stake set on random line south I set iron U. S. Forest Reserve Boundary Post No. 153, 28 ins. in ground, and raise mound of stone, 4 ft. base, 1 $\frac{1}{2}$ ft. high, around same for corner of secs. 1, 2, 11 and 12, marked
T 34 S S 1 in N. E. quadrant
R 2 W S 12 in S. E. quadrant
S 11 in S. W. quadrant
S 2 in N. W. quadrant
RESERVE in N. E., S. E. and S. W. quadrants, with 1 notch on E. and 5 on S. sides, from which
A pinion, 5 ins. diam., bears N. 28°15' E., 150 lks. dist., marked RES T 34 S R 2 W S 1 B T
A pinion, 14 ins. diam., bears S. 6° E., 88 lks. dist., marked RES T 34 S R 2 W S 12 B T
A pinion, 6 ins. diam., bears S. 62° W., 96 lks. dist., marked RES T 34 S R 2 W S 11 E T
A pinion, 8 ins. diam., bears N. 69° W., 60 lks. dist., marked T 34 S R 2 W S 2 B T
Thence from corner of secs. 1, 2, 11 and 12, thus established, I run N. 0°02' E. through scattering timber, gradually descending.

17.50 Begin descent, bears E. and W.

18.10 Base of 30-foot descent, bears E. and W.

25.00 Horse creek, 40 lks. wide, 12 ft. deep; water, 4 lks. wide, 4 ins. deep, course W.

25.20 Old dry bed of creek, course W.

27.00 Wood road, bears E. and W.

27.50 Begin ascent and enter dense timber, bears E. and W.

36.35 Brush fence, bears E. and W., runs E. 20.00 chs., then turns S.; leave pasture enclosure of Mr. Jolly, continue in timber.

38.00 Top of 90-foot ascent, bears E. and W.; begin descent bears E. and W.

40.00 Set trachyte 22x12x6 ins., 15 ins. in ground, for

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

Chains. $\frac{1}{4}$ sec. corner, marked $\frac{1}{4}$ on W. face, from which
A pinion, 10 ins. diam., bears S. 78° E., 80
lks. dist., marked RES $\frac{1}{4}$ S. 1 B T
A pinion, 12 ins. diam., bears N. 89° W., 76
lks. dist., marked $\frac{1}{4}$ S. 2 B T

50.00 Base of 80-foot descent; leave timber, enter open
flat, bears N. 70° W. and S. 70° E.

60.40 North Fork of Horse Creek, water 3 lks. wide,
4 ins. deep, course N. 70° W.

66.40 Road, bears E. and W.

68.50 Leave open flat, enter timber and begin ascent,
bears E. and W.

72.50 Top of 60-foot ascent and begin descent, bears
E. and W.

80.00 Intersect corner of secs. 1, 2, 35 and 36 on N.
boundary of township previously described, 60 ft.
below last summit.

Note: General Land Office notes call for creek 8.00
chs. N. of $\frac{1}{4}$ corner which point is on timbered ridge.
The line was evidently never run? The township
line between the $\frac{1}{4}$ corner between secs. 1 and 36
and the $\frac{1}{4}$ corner between secs. 2 and 35 was I
think run by a traverse to the south, down open
flat of Horse Creek. Nearly all work to the north
of here that falls in hills is fraudulent survey,
as the survey in T. 33 S., R. 2 W. was carried up
on second tier and backed in to the east, omitting
surveys on first tier where country is rough. In
fact, this latter seems to have been the univer-
sal practice of surveyors in this part of Utah, as
facts and evidence of settlers (some of whom were
employed on surveys) will prove.

Note: As lines run on 22nd and 23rd September are
complicated I have not noted declination and lati-
tude on those days. Below is table of declination
used on those days:

| Time. | Sep. 22nd. | Sep. 23rd. |
|------------|-------------|-------------|
| 7 o'clock, | 0°23'30" N. | 0°00' |
| 8 " | 0°21'15" N. | 0°02'15" S. |
| 9 " | 0°20' N. | 0°03'30" S. |
| 10 " | 0°18'45" N. | 0°04'45" S. |
| 11 " | 0°17'30" N. | 0°05'45" S. |
| 12 " | 0°16'30" N. | 0°06'45" S. |
| 1 " | 0°15'30" N. | 0°07'45" S. |
| 2 " | 0°14'45" N. | 0°08'30" S. |
| 3 " | 0°14' N. | 0°09'15" S. |
| 4 " | 0°13'30" N. | 0°10' S. |
| 5 " | 0°14' N. | 0°09'30" S. |

At the $\frac{1}{4}$ corner between secs. 2 and 11 I set off
0°30' S. on declination arc and at 7^m54^s before
noon, l.m.t., I observe sun on meridian and ob-
tain a reading of 37°53' on latitude arc.

Thence from true $\frac{1}{4}$ corner I run
South on random line through center of sec. 11.

80.00 No trace of old $\frac{1}{4}$ corner being found I set tem-
porary stake and proceed as follows to rees-
tablish same:

At corner of secs. 10, 11, 14 and 15, which is a
sandstone 12x8x10 ins. above ground correctly
marked,
Thence from this corner I run
East on true retracement line over open flat.

20.20 Leave open flat, enter timber and begin gradual
ascent, bears N. and S.

33.30 Top of 40-foot ascent on finger ridge bears E. 70° E.
and S. 70° W.

40.00 No trace of old $\frac{1}{4}$ sec. corner being found and as
no survey is reported east of here, I set iron

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

| | |
|---------|---|
| Chains. | <p>U. S. Forest Reserve Boundary Post No. 155, 20 ins. in ground to rock, and raise mound of stone, 4 ft. base, 2 ft. high, around same for $\frac{1}{4}$ sec. corner, marked</p> <p>$\frac{1}{4}$ S 11 on N. face</p> <p>$\frac{1}{4}$ S 14 on S. face</p> <p>RESERVE in N. E. and S. E. quadrants, from which</p> <p>A pinion, 16 ins. diam., bears S. 51°30' E., 40 lks. dist., marked RES $\frac{1}{4}$ S 11 B T</p> <p>A pinion, 18 ins. diam., bears S. 67°45' W., 160 lks. dist., marked $\frac{1}{4}$ S 14 B T</p> <p>The point for this $\frac{1}{4}$ corner as thus established is 68 lks. south and 76 lks. east of temporary stake set on line south through center of sec. 11.</p> <p>Thence from $\frac{1}{4}$ sec. corner between secs. 11 and 14 as above established I run</p> <p>N. 0°32' W. on true line through center of sec. 11, through scattering timber, gradually ascending.</p> |
| 2.70 | <p>Top of 90-foot ascent on finger ridge, bears N. 70° E. and S. 70° W.</p> |
| 21.20 | <p>Draw, 10 lks. wide, 10-foot banks, course S. 70° W. Leave timber, enter open flat, bears N. 70° E. and S. 70° W.</p> |
| 80.63 | <p>I set iron U. S. Forest Reserve Boundary Post No. 154, 32 ins. in ground, and build mound of small washed boulders, 2 ft. base, 1 ft. high, around same for W. C. to $\frac{1}{4}$ sec. corner, marked W C on top of cap</p> <p>$\frac{1}{4}$ S 2 on N. face</p> <p>$\frac{1}{4}$ S 11 on S. face</p> <p>RESERVE in S. E. quadrant.</p> <p>No bearing trees available; pits impracticable.</p> |
| 80.68 | <p>Intersect $\frac{1}{4}$ section corner between secs. 2 and 11. Land, rolling and level.</p> <p>Soil, gravelly, sandy, 3rd and 4th rate.</p> <p>Timber, pinion-pine and some scattering yellow pine.</p> |
| 80.00 | <p>From $\frac{1}{4}$ sec. corner between secs. 11 and 14 I run South on a random line through center of sec. 14. No trace of $\frac{1}{4}$ corner on south boundary of sec. 14 being found I proceed as follows to reestablish same.</p> |
| 80.33 | <p>Fall 59 lks. E. of $\frac{1}{4}$ sec. corner established below. From corner of secs. 14, 15, 22 and 23 I run East on true retracement line between secs. 14 and 23, over rolling timbered land.</p> |
| 4.50 | <p>Begin gradual descent.</p> |
| 9.00 | <p>Draw, 10 lks. wide, course N. 30° W., at base of 40-foot descent; begin ascent.</p> |
| 17.00 | <p>Draw, 8 lks. wide, course S. W.</p> |
| 25.00 | <p>Top of 60-foot ascent bears N. and S.; begin descent.</p> |
| 30.40 | <p>Draw, 10 lks. wide, course N. 20° W., base of 70-foot descent; begin ascent.</p> |
| 38.50 | <p>Top of 90-foot ascent bears N. and S.</p> |
| 40.00 | <p>As old survey does not extend to east, at this point I set sandstone 18x12x10 ins, 12 ins. in ground for $\frac{1}{4}$ sec. corner marked $\frac{1}{4}$ on N. face, from which</p> <p>A cedar, 8 ins. diam., bears N. 54° W., 72 lks. dist., marked $\frac{1}{4}$ S 14 B T</p> <p>A cedar, 10 ins. diam., bears S. 57°15' E., 82 lks. dist., marked RES $\frac{1}{4}$ S 23 B T</p> <p>This corner as thus established is 33 lks. south and 59 lks. west of temporary stake set on random line south through center of sec. 14.</p> <p>Thence from the $\frac{1}{4}$ sec. corner between secs. 14 and 23 as above established I run</p> <p>N. 0°25' E. on true line through center of sec. 14 over rolling land, through open timber, descending.</p> |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

| Chains. | |
|---------|---|
| 9.00 | Open hollow draw, course N. W., base of 150-foot descent. |
| 19.50 | Head of draw, course W. |
| 23.30 | Begin descent, bears E. and W. down morain spur of washed pebbles. |
| 38.60 | Draw, 15 lks. wide, course N. W., at base of 90-foot descent, begin ascent. |
| 47.80 | Top of 50-foot ascent, bears E. and W., begin descent. |
| 53.20 | Draw, 10 lks. wide, course N. W., at base of 50 ft. descent. |
| 64.30 | Open draw, course N.; begin ascent, bears E. and W. |
| 66.30 | Top of 40-foot ascent, bears N. 70° E. and S. 70° W., begin descent. |
| 76.30 | Base of 50-foot descent, bears N. E. and S. 70° W. |
| 76.80 | Open draw, course S. 70° W. |
| 80.33 | Intersect the $\frac{1}{2}$ sec. corner between secs. 11 and 14. Land, hilly and rolling spur ridges of washed boulders and pebbles, resembling a morain formation. Soil, rocky and gravelly, 4th rate. Timber, pinion, cedar and some yellow pine. |

September 24, 1904.

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| | September 26: From $\frac{1}{2}$ sec. corner between secs. 14 and 23 I run |
| | South on random line through center of sec. 23, through scattering timber along E. slope of spur. |
| 81.00 | Intersect south boundary of section at the $\frac{1}{2}$ sec. corner between secs. 23 and 26, which is a limestone 8x10x6 ins. above ground, properly marked and firmly set, as called for in notes of General Land Office, from which |
| | A yellow pine, 24 ins. diam., bears S. 62°15' E. 322 lks. dist., I mark $\frac{1}{2}$ S 26 B T |
| | Thence from true $\frac{1}{2}$ sec. corner I run |
| | North on true line through center of sec. 23 over level open valley "Sweetwater Valley". |
| .60 | Corner of fence, which bears N. and W. |
| 12.60 | Corner of fence which bears S. and E. |
| 13.50 | Set iron U. S. Forest Reserve boundary Post No. 186, 30 ins. in ground, and build mound of stones, 4 ft. base, 1 $\frac{1}{2}$ ft. high around same for reserve boundary marking on south side of main road, marked RESERVE in N. E. and S. E. quadrants. |
| 13.70 | Escalante and Coyote road, bears N. 70° W. and S. 70° E.; enter timber and begin abrupt ascent, bears E. 70° W. and S. 70° E. |
| 25.60 | Draw in 30-foot depression, course S. E. Heads 3.00 chs. N. E. of here. |
| 32.00 | Top 100-foot ascent, bears N. 60° W. and S. 60° E., begin gradual descent. |
| 45.25 | Draw, 10 lks. wide, course N. 60° W., at base of 70-foot descent; begin gradual ascent. |
| 51.00 | Top of 40-foot ascent, bears N. 60° W. and S. 60° E. |
| 53.00 | Begin descent, bears E. and S. |
| 61.25 | Draw, 10 lks. wide, course W., at base of 70-foot descent, begin ascent. |
| 66.00 | Top of 50-foot ascent, bears E. and W., on west end of spur; begin descent. |
| 74.90 | Draw, 10 lks. wide, course S. 60° W., at base of 50-foot descent, begin ascent; timber becomes scattering. |
| 79.00 | Top of 60-foot ascent, bears N. W. and S. E. |
| 81.00 | Intersect the $\frac{1}{2}$ sec. corner between secs. 14 and 23. Land, hilly and broken; ledges and morain formation. Soil, rocky and gravelly, 4th rate; sandy loam, 2nd rate in Sweetwater Valley. Timber, pinion and cedar. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

| | |
|--------|---|
| Chains | From the $\frac{1}{4}$ corner between secs. 23 and 26 I run East on random retracement line between secs. 23 and 26. |
| 40.19 | Intersect N. and S. section line 12 lks. S. of corner of secs. 23, 24, 25 and 26, which is a sandstone 8x6x8 ins. above ground, marked with 1 notch on E. and 2 on S. sides, as described in notes of General Land Office. No bearing trees available and I build mound of stone, 4 ft. base, 2 ft. high, W. of corner. |
| | Thence from corner of secs. 23, 24, 25 and 26 I run |
| | S. 89°50' W. on true tetracement line between secs. 23 and 26, over open level land "Sweetwater Valley". |
| 2.20 | Road, bears N. 80° W. and S. 80° E., Escalante and Coyoto road. |
| 4.00 | Plank pen, 50 lks. square, center on line. |
| 27.60 | Wash (dry), 5 lks. wide, 4 ft. banks, in flat, course N. 70° W. |
| 34.40 | Old pole fence bears N. 80° W. and S. 80° E. |
| 40.14 | Five lks. east of this $\frac{1}{4}$ sec. corner I set iron U. S. Forest Reserve Boundary Post No. 157, 30 ins. in ground, and build mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, around same for W. C. to $\frac{1}{4}$ sec. corner, marked |
| | W C on top of cap |
| | $\frac{1}{4}$ S 23 on N. face |
| | $\frac{1}{4}$ S 26 on S. face |
| | RESERVE in N. E. quadrant. |
| 40.19 | At the $\frac{1}{4}$ sec. corner between secs. 23 and 26. Land, level bottom. |
| | Soil, sandy loam, 2nd rate. |
| | No timber. |
| <hr/> | |
| | At corner of secs. 23, 24, 25 and 26 I set off 1°17' S. on declination arc and at 8 ^m 36 ^s before noon by l.m.t., I observe sun on meridian and obtain a reading of 37°50' on latitude arc. |
| | Thence I run |
| | East on random retracement line between secs. 24 and 25. |
| 40.00 | No trace of old $\frac{1}{4}$ sec. corner being found and as survey does not extend to the east, at this point I set iron U. S. Forest Reserve Boundary Post No. 158, 28 ins. inground, and build mound of stone 4 ft. base, $1\frac{1}{2}$ ft. high, around same for $\frac{1}{4}$ sec. corner, marked |
| | $\frac{1}{4}$ S 24 on N. face |
| | $\frac{1}{4}$ S 25 on S. face |
| | RESERVE in W. W., N. E. and S. E. quadrants, from which |
| | A pinion, 16 ins. diam., bears N. 2°30' W., 89 lks. dist., marked RES $\frac{1}{4}$ S 24 B T |
| | No other trees available. |
| | Thence from this $\frac{1}{4}$ sec. corner I run |
| | West on true line between secs. 24 and 25 over level open bottom land. |
| 12.20 | Road bears N. 80° W. and S. 80° E., Escalante and Coyoto road. |
| 38.00 | Same road, bears N. 80° E. and S. 80° W. |
| 40.00 | Intersect corner of Secs. 23, 24, 25 and 26. Land, level bottom. |
| | Soil, sandy loam and gravelly, 3rd rate, |
| | No timber. |

From $\frac{1}{4}$ sec. corner between secs. 24 and 25 I run

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

| | |
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| Chains | South on random line through center of sec. 25. |
| 80.00 | No trace of $\frac{1}{4}$ sec. corner on south boundary of sec. being found I set temporary stake and proceed as follows to reestablish the $\frac{1}{4}$ sec. corner. |
| 79.50 | Intersect south boundary of sec. 25, 3 lks. E. of $\frac{1}{4}$ sec. corner, as established by me as follows: From corner of secs. 25, 26, 35 and 36 I run East on true line between secs. 25 and 36, over rolling prairie land. |
| 1.80 | Draw, 10 lks. wide, course N. 20° W. |
| 16.75 | Draw, 10 lks. wide, course N. 20° W. |
| 26.20 | Wash, 5 lks. wide, course N. |
| 29.30 | Wash, 5 lks. wide, course N. |
| 35.00 | Enter open bottom land, bears N. 70° W. and S. 70° E. |
| 40.00 | Set iron U. S. Forest Reserve Boundary Post No. 159, 30 ins. in ground, and build mound of stone, 4 ft. base, $1\frac{1}{2}$ ft. high, around same for $\frac{1}{4}$ sec. corner between secs. 35 and 36, marked $\frac{1}{4}$ S 25 on N. face $\frac{1}{4}$ S 36 on S. face RESERVE in N. E. and S. E. quadrants, from which A yellow pine, 20 ins. diam., bears S. 72°30' W., 497 lks. dist., marked $\frac{1}{4}$ S 36 B T No other trees available. |
| | The point for this $\frac{1}{4}$ sec. corner as thus established is 50 lks. N. and 3 lks. W. of temporary stake set on random line south through center of sec. 25. |
| | Thence from the $\frac{1}{4}$ sec. corner between secs. 25 and 36 I run N. 0°01' E. on true line through center of sec. 25 over open bottom land, some scattering yellow pine. |
| 1.30 | South Creek, 10 lks. wide, 6 ft. banks, stream of water, 2 lks. wide, 1 in. deep, course N. 70° W. |
| 4.50 | Leave bottom land, begin ascent, bears N. 70° W. and S. 70° E. |
| 14.00 | Top of 60-foot ascent on S. W. slope of spur, begin descent. |
| 18.30 | Draw, 8 lks. wide, course S. W., at base of 30-foot descent, begin ascent. |
| 23.00 | Top of 70-foot ascent, bears E. and W.; thence over rolling surface. |
| 40.50 | Begin descent, bears N. 60° W. and S. 60° E. |
| 52.50 | Open draw, 10 lks. wide, course N. 60° W., base of 100-foot descent, begin ascent. |
| 59.00 | Top of 80-foot ascent, bears E. and W., begin descent. |
| 66.00 | Base of 100-foot descent, enter open valley, "Sweet Water Valley", bears N. 80° W. and S. 80° E. |
| 70.10 | Dry wash in flat, 10 lks. wide, 6 ft. banks, course N. 80° W. |
| 78.30 | Road bears N. 80° W. and S. 80° E., Escalante and Coyoto road. |
| 79.50 | Intersect the $\frac{1}{4}$ sec. corner between secs. 24 and 25. Land, level and rolling morain formation. Soil, rocky and gravelly, 3rd and 4th rate. Timber, occasional yellow pine. |
| 79.80 | From the $\frac{1}{4}$ sec. corner between secs. 25 and 36 I run South on random line through center of sec. 36. Intersect south boundary of township 60 lks. E. of the $\frac{1}{4}$ sec. corner on south boundary of sec. 36, which is iron boundary post No. 1 set by me on beginning of survey. Thence I run N. 0°26' E. on true line through center of sec. 36, over rolling open land, gradually ascending. |
| 6.00 | Top of 80-foot ascent, enter timber, bears N. 80° E. and S. 80° W. |

AQUARIUS FOREST RESERVE BOUNDARY.

T. 34 S., R. 2 W.

Chains

- 28.50 Head of draw, course E. 20° E.
 50.00 Leave thick, enter scattering timber, bears E. and W.
 77.10 Leave rolling land, enter bottom land, bears E. 80° W. and S. 80° E.
 79.80 Intersect $\frac{1}{4}$ sec. corner between secs. 25 and 36. Land, rolling and hilly, morain formation. Soil, rocky and gravelly. Timber, yellow pine and pinion.

September 26, 1904,
 Jno. P. Walker,
 U. S. Surveyor.

LIST OF NAMES.

A list of the names of the individuals employed by Jno. P. Walker
 _____, United States ~~Deputy~~ Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of _____
Aquarius Forest Reserve Boundary
 showing the respective capacities in which they acted:

J. J. Elliott, P. S. Darlington, _____, *Chainman*.
A. G. Wimer, Arthur B. McAntire, _____, *Chainman*.
J. J. Elliott, L. A. Willis, _____, *Moundman*.
Albern Allen, _____, *Moundman*.
Albern Allen, L. A. Willis, _____, *Axman*.
William Brinkerhoff, J. J. Elliott, L. G. Luke, _____, *Axman*.
Arthur B. McAntire, _____, *Flagman*.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jno. P. Walker,
 _____, United States ~~Deputy~~ Surveyor, in surveying all
 those parts or portions of the Aquarius Forest Reserve Boundary,

 _____ of the Salt Lake
Base and _____ meridian, State _____ of Utah _____, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the ~~United States Surveyor~~
~~General~~ Director, U. S. Geological Survey.

J. J. Elliott, P. S. Darlington, _____, *Chainman*.
A. G. Wimer, Arthur B. McAntire, _____, *Chainman*.
J. J. Elliott, L. A. Willis, _____, *Moundman*.
Albern Allen, _____, *Moundman*.
Albern Allen, L. A. Willis, _____, *Axman*.
William Brinkerhoff, J. J. Elliott, L. G. Luke, _____, *Axman*.
Arthur B. McAntire, _____, *Flagman*.

described and sworn to before me this 26 }
 day of September, 1904. }
Sept. 3 for Wimer, _____ Jno. P. Walker,
Sept. 23 " Wm. Brinkerhoff, _____ U. S. Surveyor.
Sept. 2 " L. A. Willis as Axman.
Aug. 16 " McAntire as Chainman.
Aug. 16 & Sept. 26 for Elliott as Chainman.
July 25 for Elliott as Axman.

I, Jno. P. Walker, United States ~~Deputy~~ ^{orders} Surveyor,
solemnly swear that, in pursuance of ~~contract~~ ^{orders} received from Director, U. S. Geological
~~United States Surveyor General for~~ ^{Survey}, bearing date of
13 day of May, 1904, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the ^{Director} ~~United States Survey~~
~~General for~~ Geological Survey, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of
Aquarius Forest Reserve Boundary

of the Salt Lake
Base and meridian, in the State of Utah, which are represented in
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the ^{Director} ~~United States Survey~~
~~General for~~ Geological Survey and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey.

Jno. P. Walker,
United States ~~Deputy~~ Surveyor

Subscribed by said Jno. P. Walker, and sworn to before me }
this 25 day of November, 1904. }



W. C. Andrews,
County Clerk.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
OFFICE OF THE DIRECTOR UNITED STATES GEOLOGICAL SURVEY.

May 31, 1904

The foregoing field notes of the survey of Aquarius Forest Reserve
Boundary

executed by Jno. P. Walker, U. S. Surveyor,
under his ~~contract~~ ^{orders} No. May 13, 1904, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

H. C. Rizer
Acting Director U. S. Geological

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this office

H. C. Rizer
Acting Director U. S. Geological